L1 STRUCTURE UPLOADED
L2 8 L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:54:59 ON 23 APR 2003
L3 4 L2

=> d que stat l3
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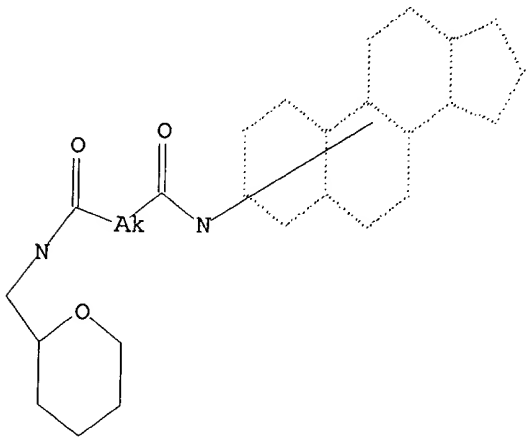

G1

Structure attributes must be viewed using STN Express query preparation.
L2 8 SEA FILE=REGISTRY SSS FUL L1
L3 4 SEA FILE=CAPLUS ABB=ON PLU=ON L2

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L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:884126 CAPLUS
DOCUMENT NUMBER: 134:147764
TITLE: Micellization of Hydrophobically Modified Cyclodextrins: 2. Inclusion of Guest Molecules
AUTHOR(S): Auzely-Velty, R.; Pean, C.; Djedaieni-Pilard, F.; Zemb, Th.; Perly, B.
CORPORATE SOURCE: Service de Physico-Chimie Analytique, Institut de Recherches SERVIER, Suresnes, 92150, Fr.
SOURCE: Langmuir (2001), 17(2), 504-510
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The association of guest mols. in aggregates of a modified cyclodextrin, 6I-(cholest-5-en-3α-ylamido)succinylamido-6I-deoxy-per(2,6-di-O-methyl)cyclomaltoheptaose, was investigated for four different sparingly water-soluble mols. and an anionic surfactant (sodium dodecyl sulfate). The binding and spatial proximities were demonstrated for these different guests by NMR (nuclear Overhauser effect pumping). By use of small-angle X-ray and neutron scattering, the microstructure at the supramol. scale of

the modified cyclodextrin micelle, i.e., aggregation number, charge, and volume, in the presence of guest mols. could be defined. From the anal. of the variations in terms of aggregation number and charge induced by the presence of the guest mol., the cavity of the cyclodextrin was shown to remain available for solubilization and transport. The stability and specificity of the mixed micelle involving target mols. demonstrated here make these hydrophobically modified cyclodextrins good candidates as mol. carriers.

IT **324020-36-2P 324020-37-3P 324020-39-5P**
324020-40-8P 324020-41-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(micellization and inclusion of hydrophobically modified cyclodextrins)

RN 324020-36-2 CAPLUS

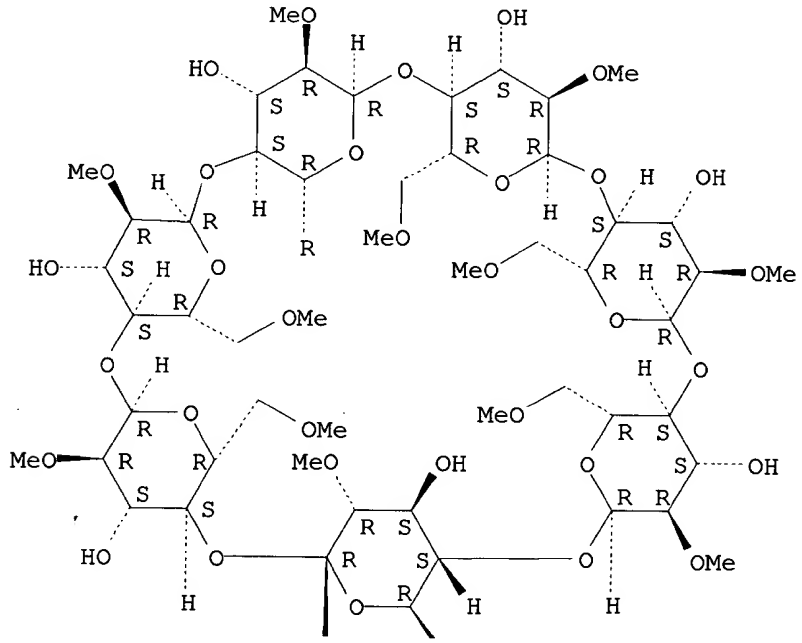
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl-, compd. with methyl α-D-mannopyranoside (1:1) (9CI) (CA INDEX NAME)

CM 1

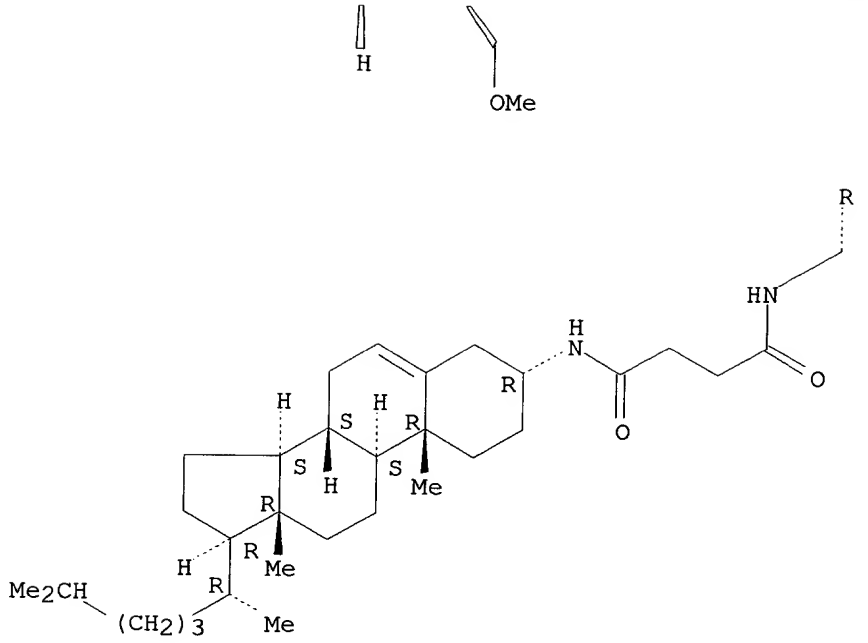
CRN 269745-79-1
CMF C86 H146 N2 O36

Absolute stereochemistry.

PAGE 1-A



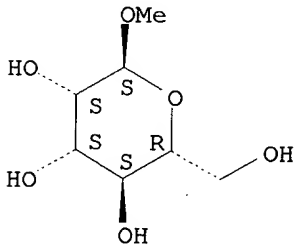
PAGE 2-A



CM 2

CRN 617-04-9
CMF C7 H14 O6

Absolute stereochemistry.



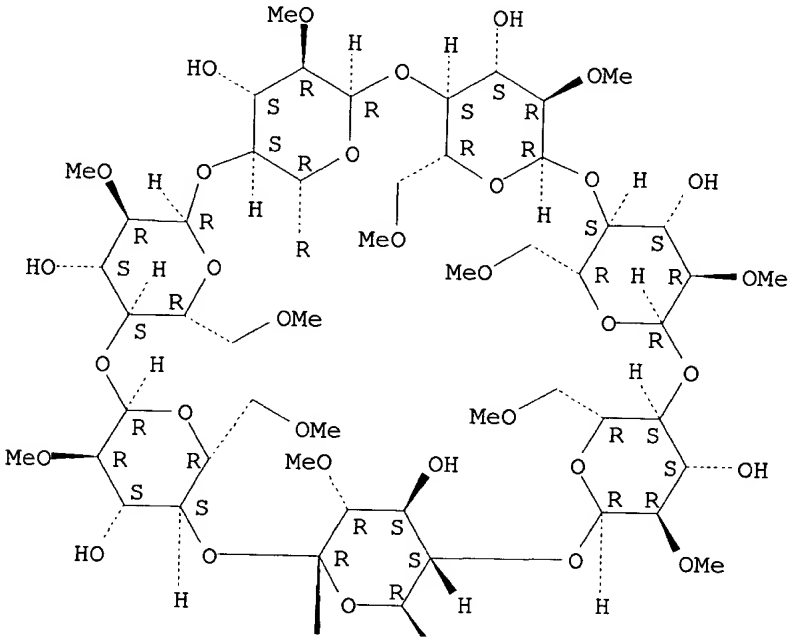
RN 324020-37-3 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl-, compd. with (3Z)-3-dibenzo[b,e]thiepin-11(6H)-ylidene-N,N-dimethyl-1-propanamine hydrochloride (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 269745-79-1
CMF C86 H146 N2 O36

Absolute stereochemistry.

PAGE 1-A



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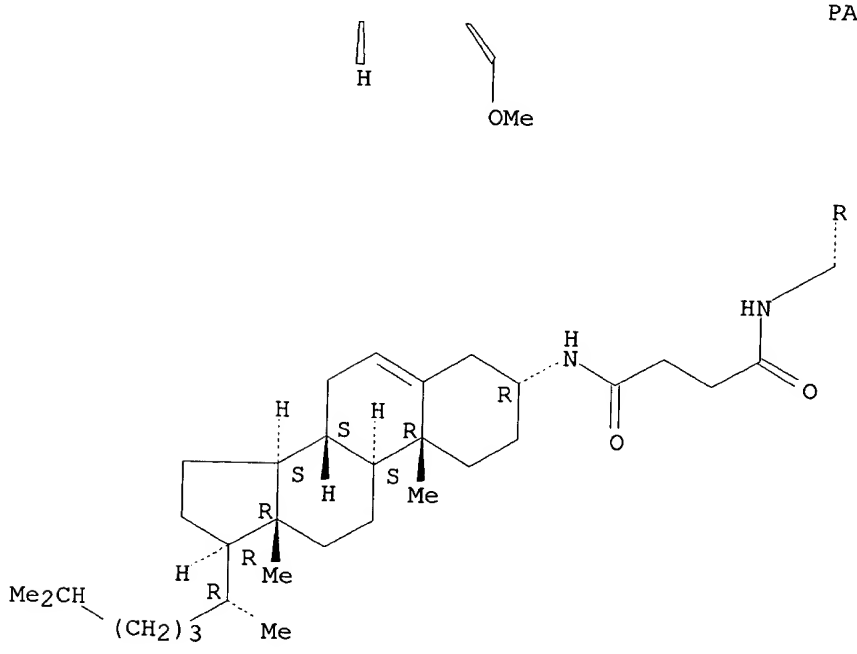

CM 2

CRN 25627-39-8
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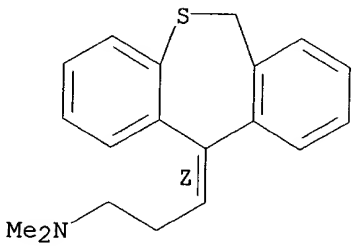
Double bond geometry as shown.



● HCl

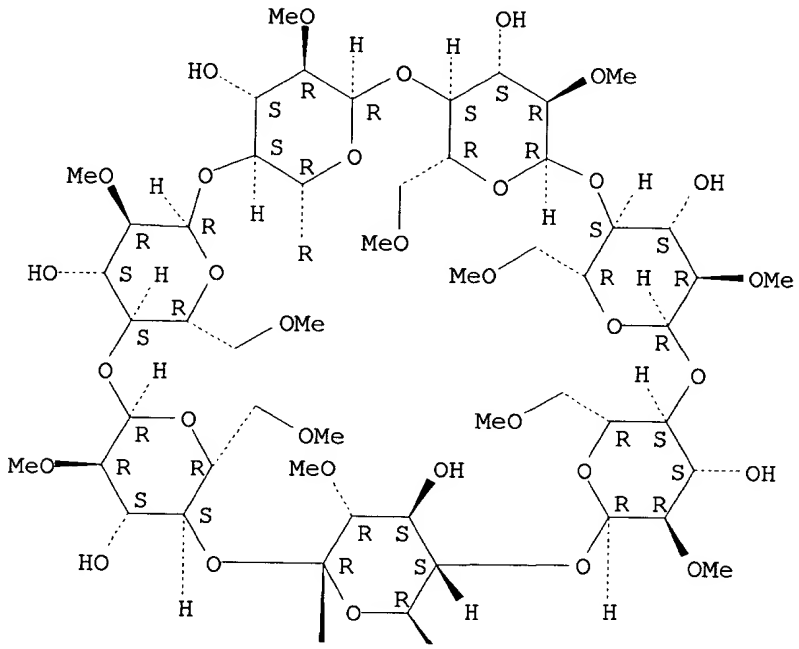
RN 324020-39-5 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl-, compd. with 2,2-dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]acetamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 269745-79-1
CMF C86 H146 N2 O36

Absolute stereochemistry.

PAGE 1-A



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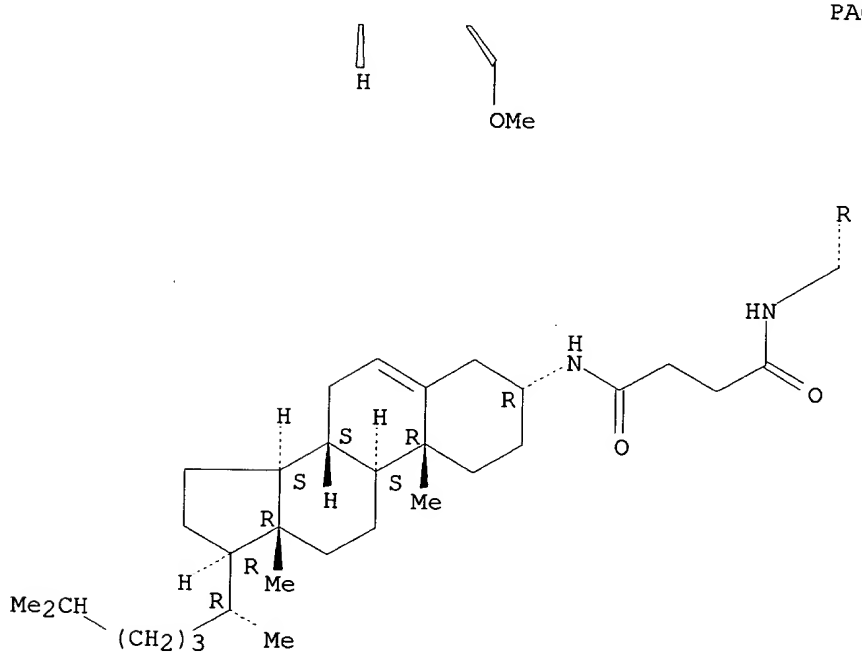
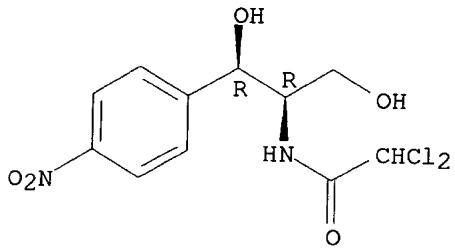


CM 2

CRN 56-75-7
CMF C11 H12 Cl2 N2 O5

Absolute stereochemistry. Rotation (-).



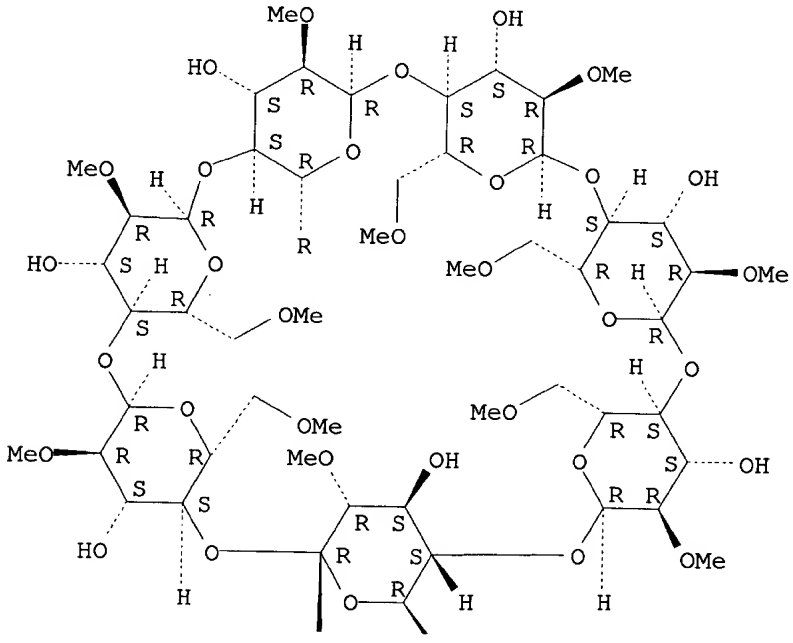
RN 324020-40-8 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl-, compd. with sodium dodecyl sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 269745-79-1
CMF C86 H146 N2 O36

Absolute stereochemistry.

PAGE 1-A



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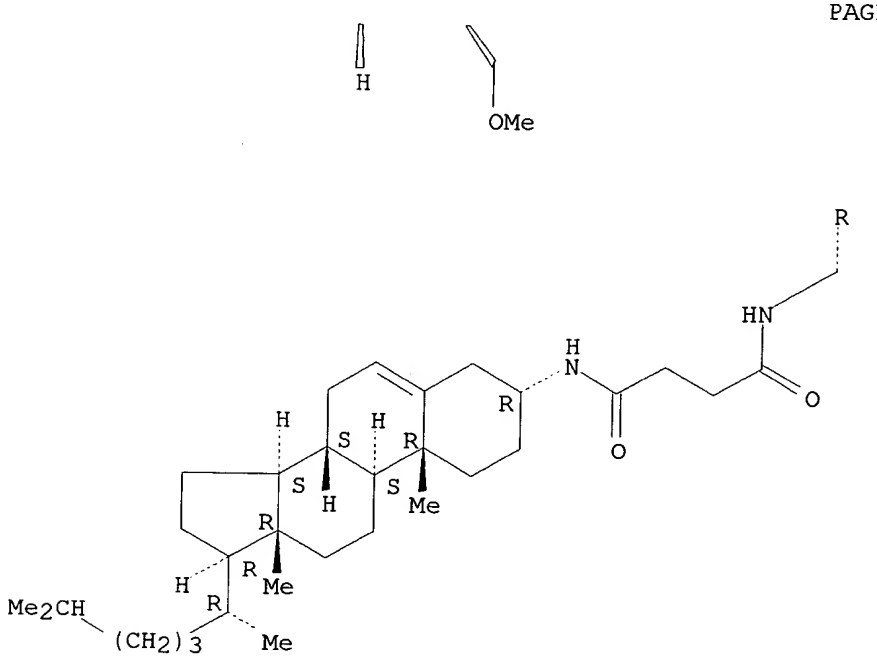


CM 2

CRN 151-21-3
CMF C12 H26 O4 S . Na

$HO_3SO-(CH_2)_{11}-Me$

● Na

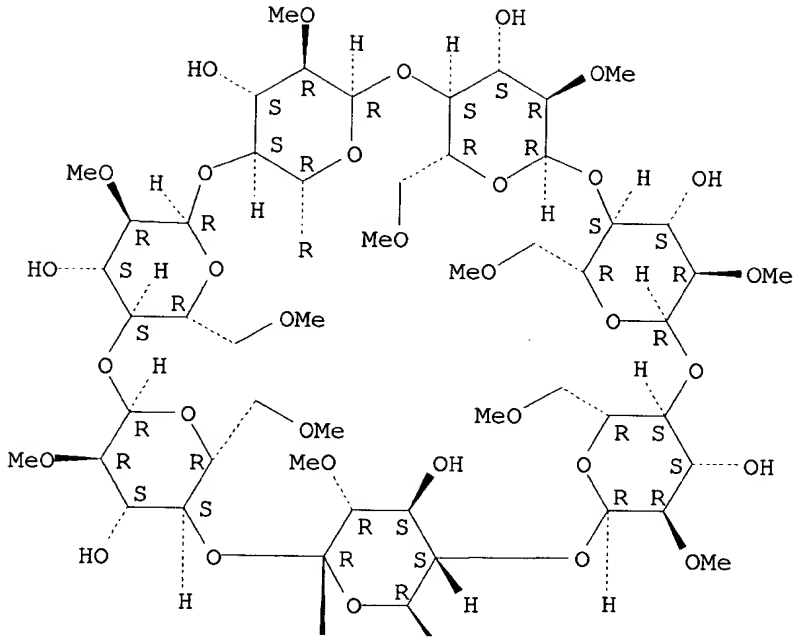
RN 324020-41-9 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl-, compd. with sodium 4-(1,1-dimethylethyl)benzoate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 269745-79-1
CMF C86 H146 N2 O36

Absolute stereochemistry.

PAGE 1-A



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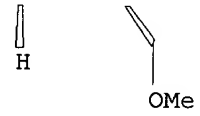
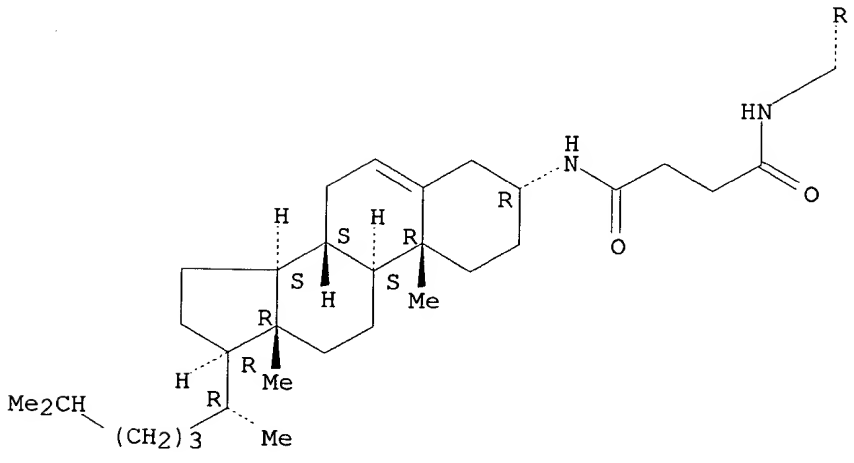
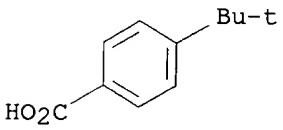




CM 2

CRN 17264-53-8
CMF C11 H14 O2 . Na



● Na

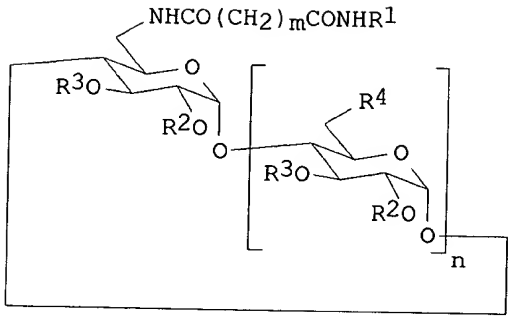
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:790552 CAPLUS
DOCUMENT NUMBER: 133:351719
TITLE: Amphiphilic cyclodextrins, their preparation and use for solubilizing and transporting hydrophobic molecules in aqueous media
INVENTOR(S): Auzely-Velty, Rachel; Perly, Bruno; Djedaini-Pilard, Florence
PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066635	A1	20001109	WO 2000-FR1102	20000426
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2792942	A1	20001103	FR 1999-5460	19990429
FR 2792942	B1	20010608		
EP 1177217	A1	20020206	EP 2000-922751	20000426
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002543249	T2	20021217	JP 2000-615663	20000426

PRIORITY APPLN. INFO.: FR 1999-5460 A 19990429
WO 2000-FR1102 W 20000426

OTHER SOURCE(S): MARPAT 133:351719
GI



I

AB Cyclodextrin derivs. of formula I [R1 = steroid residue; R2 = (un)substituted alkyl or aryl; R3 = H, R2; R4 = OR2, or 1 R4 = NHCO(CH2)mCONHR1] are useful for transporting hydrophobic mols. for pharmaceutical or cosmetic uses, by forming organized systems in an aqueous medium, independently or associated with phospholipids. Thus, 6-azido-6-deoxy-β-cyclodextrin was methylated on the OH groups in the 2 and 6 positions to a tridecamethyl ether, which was converted to the amine, treated with succinic anhydride, and the product amidated with cholest-5-en-3α-ylamine to give I (R1 = cholest-5-en-3α-yl, R2 = Me, R3 = H, R4 = OMe, m = 2, n = 6) (II). An aqueous solution of II at a concentration above its critical micelle concentration formed spherical nanoparticles of diameter 60 Å, which could form inclusion compds. with fatty acids and other hydrophobic mols.

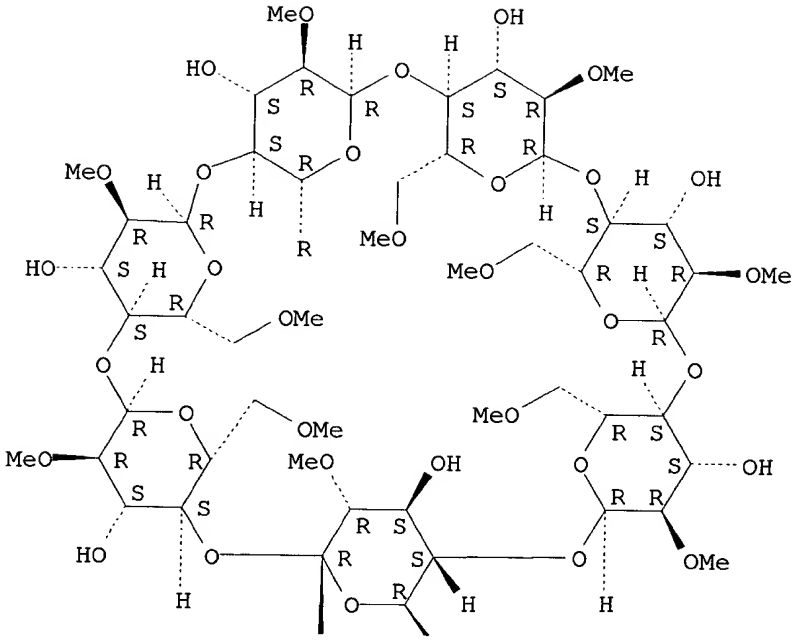
IT **269745-79-1P**
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amphiphilic cyclodextrins for solubilizing and transporting hydrophobic mols. in aqueous media)

RN 269745-79-1 CAPLUS

CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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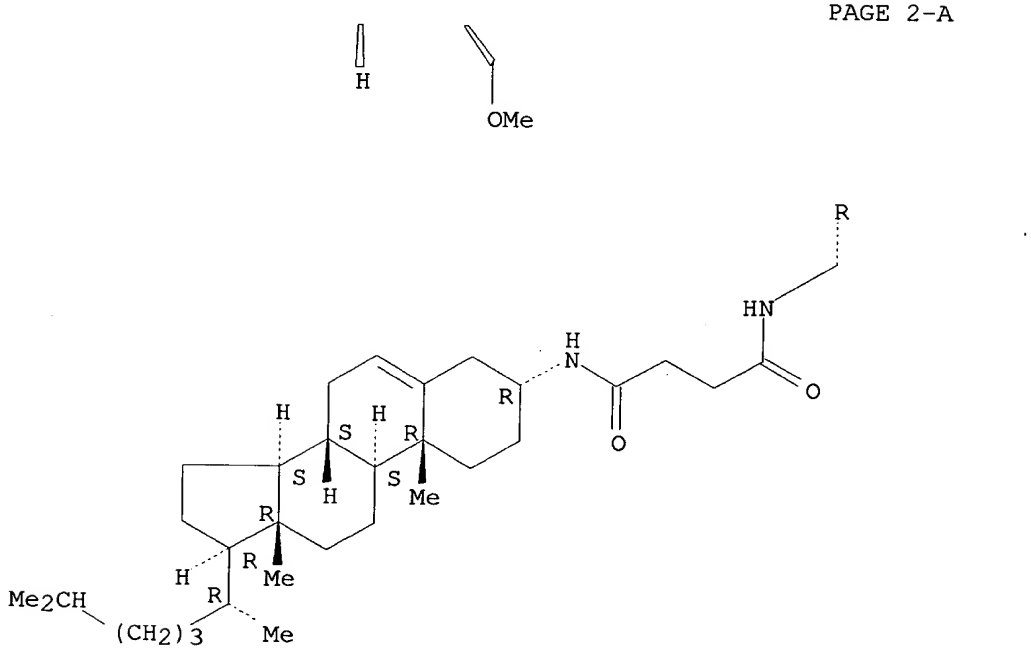


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

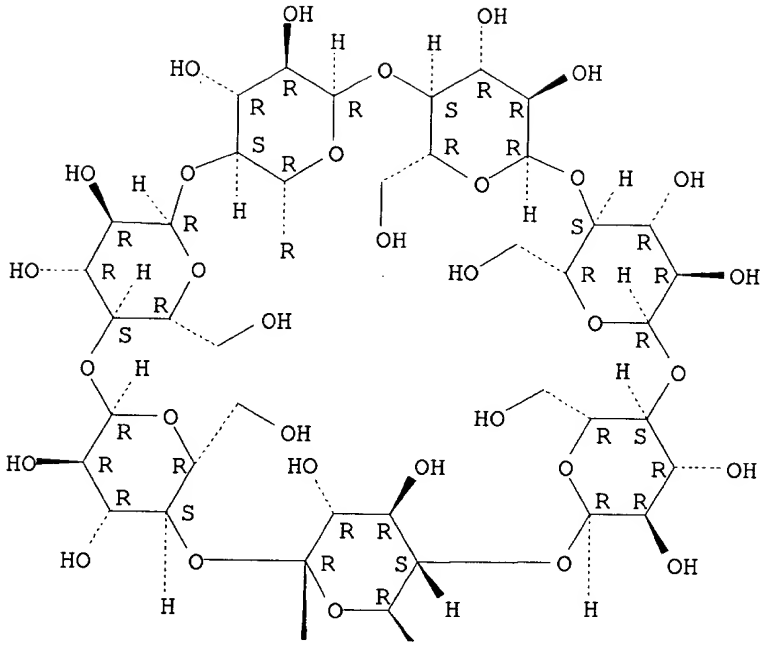
L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:164867 CAPLUS
DOCUMENT NUMBER: 132:347811
TITLE: Micellization of Hydrophobically Modified Cyclodextrins. 1. Micellar Structure
AUTHOR(S): Auzely-Velty, R.; Djedaieni-Pilard, F.; Desert, S.; Perly, B.; Zemb, Th.
CORPORATE SOURCE: Service de Chimie Moleculaire DRECAM CEA Saclay, Gif sur Yvette, F-91191, Fr.
SOURCE: Langmuir (2000), 16(8), 3727-3734
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The grafting of a cholesterol derivative onto a methylated cyclodextrin through a spacer arm produces an amphiphilic compound exhibiting high solubility in water. This new mol. was fully characterized in terms of chem. and optical purities by high resolution NMR and mass spectrometry. An anal. of its behavior in aqueous solution using surface tension measurements and light, small-angle X-ray, and neutron scattering techniques proved that it self-assembles into monodisperse spherical micelles with an average aggregation number of 24. The micelles can be described as two-shell objects, the cyclodextrin moieties being exposed to the aqueous medium, making them prone to include guest mols. in the cavities. These objects can therefore be of high interest for the targeting of biol. important mols. and especially for the delivery of drugs.

IT **250256-27-0**
RL: PRP (Properties)
(preparation and micellization of hydrophobically modified cyclodextrins)
RN 250256-27-0 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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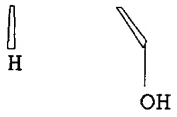
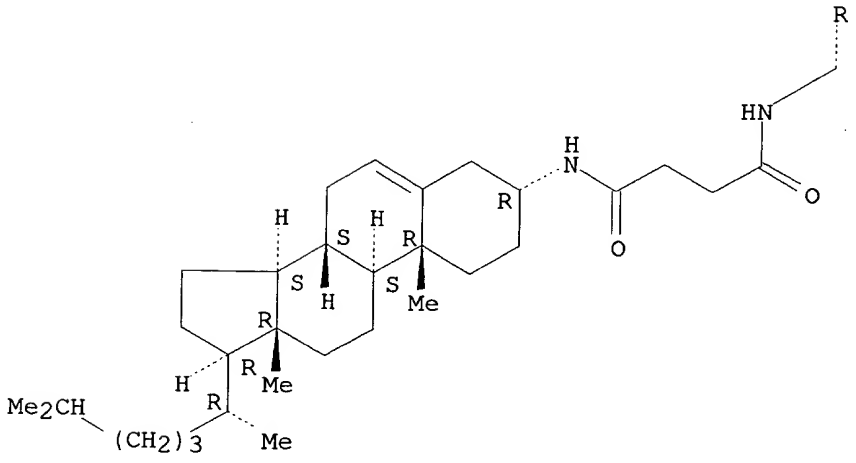




IT **269745-79-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

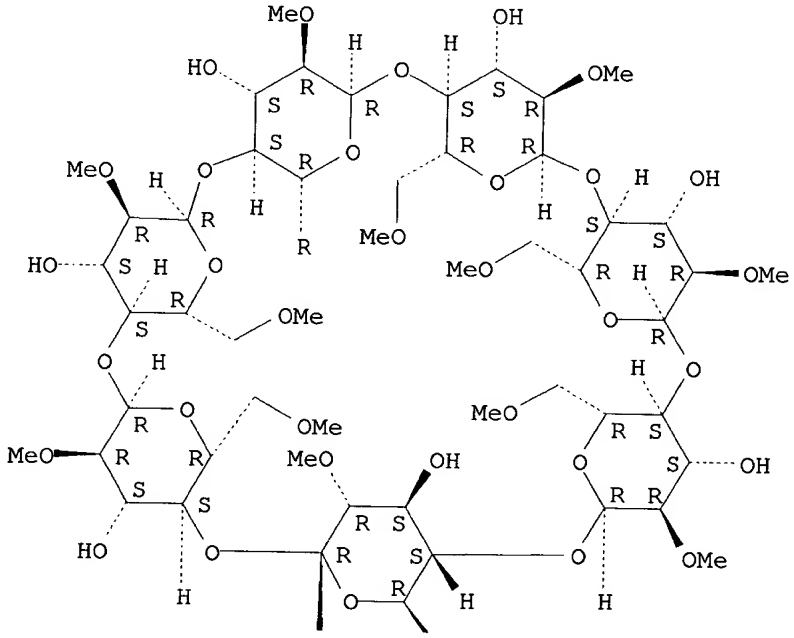
(preparation and micellization of hydrophobically modified cyclodextrins)

RN 269745-79-1 CAPLUS

CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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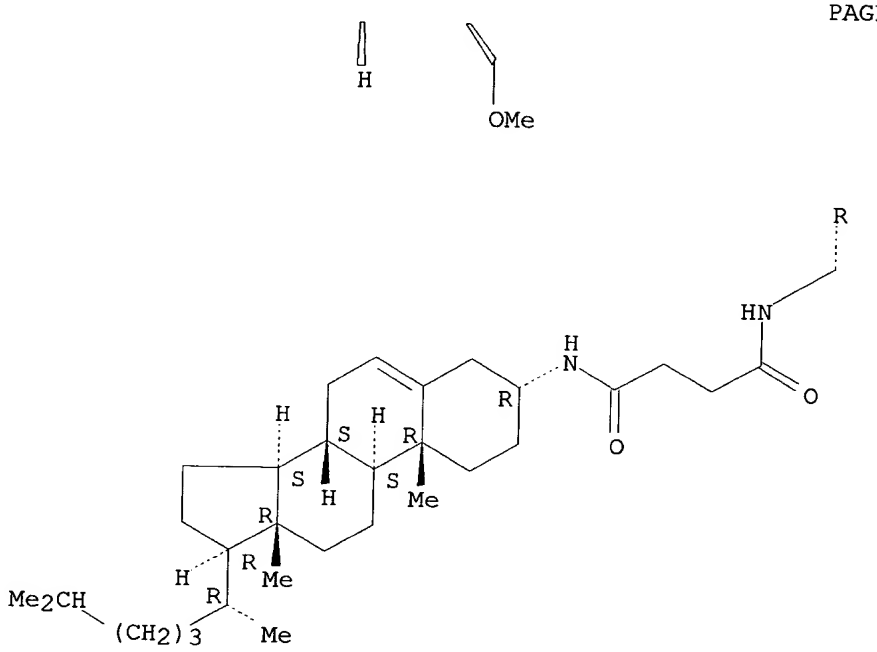


REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:568419 CAPLUS
DOCUMENT NUMBER: 131:351563
TITLE: Cholesteryl-cyclodextrins: synthesis and insertion into phospholipid membranes
AUTHOR(S): Auzely-Velty, R.; Perly, B.; Tache, O.; Zemb, T.; Jehan, P.; Guenot, P.; Dalbiez, J.-P.; Djedaini-Pilard, F.
CORPORATE SOURCE: CEA Saclay, Service de Chimie Moleculaire DRECAM, Gif sur Yvette, F-91191, Fr.
SOURCE: Carbohydrate Research (1999), 318(1-4), 82-90
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 6I-(Cholest-5-en-3β-yloxycarbonyl)amino-6I-deoxycyclomaltoheptaose and 6I-(cholest-5-en-3α-ylamido)succinylamido-6I-deoxycyclomaltoheptaose were synthesized and fully characterized by NMR spectroscopy expts. and mass spectrometry anal. Incorporation of these monosubstituted amphiphilic cyclodextrins into phospholipid bilayers was investigated using small-angle X-ray scattering, differential scanning calorimetry and 31P NMR. Different modes of incorporation depending on the spacer length between the cyclodextrin and cholesterol moieties were observed

IT **250256-28-1P**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(cholesterylcyclodextrins synthesis and insertion into phospholipid membranes)

RN 250256-28-1 CAPLUS

CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-, compd. with (7R)-4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-3,5,9-trioxa-4-phosphatricosan-1-aminium inner salt 4-oxide (1:1) (9CI) (CA INDEX NAME)

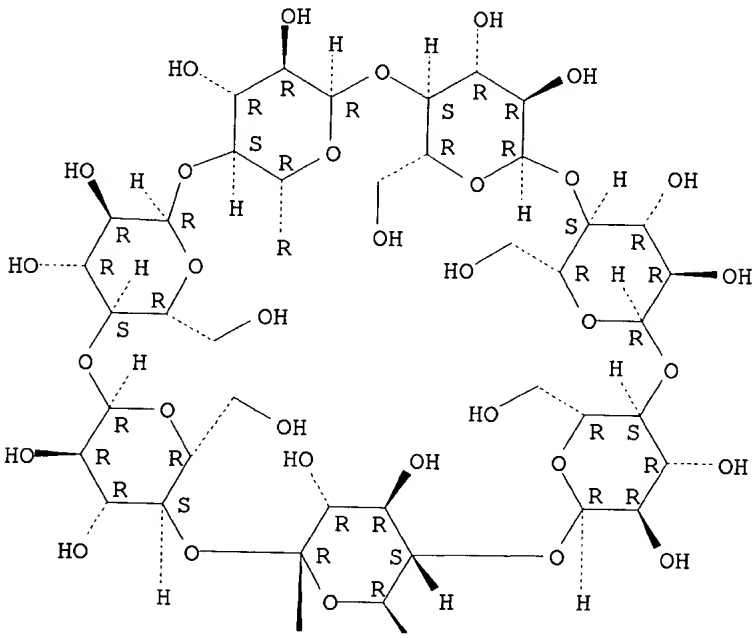
CM 1

CRN 250256-27-0

CMF C73 H120 N2 O36

Absolute stereochemistry.

PAGE 1-A



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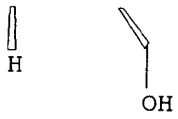

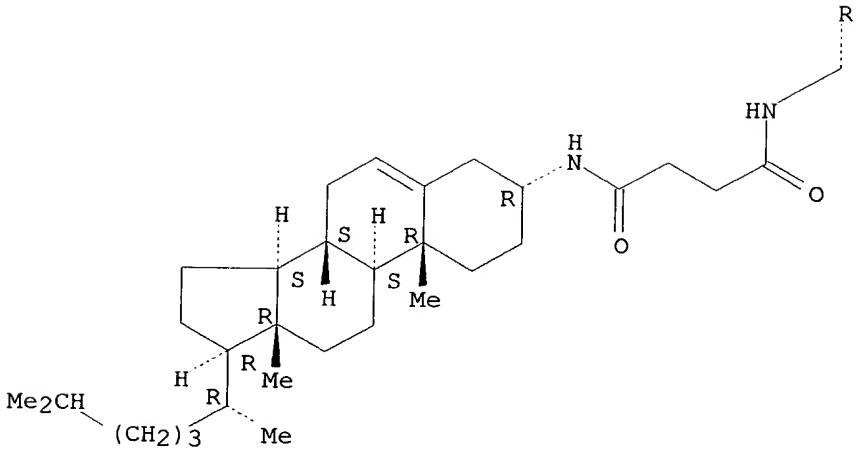

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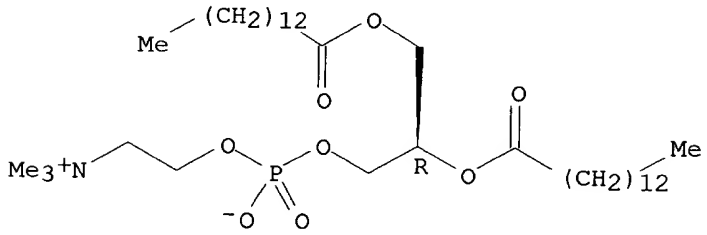
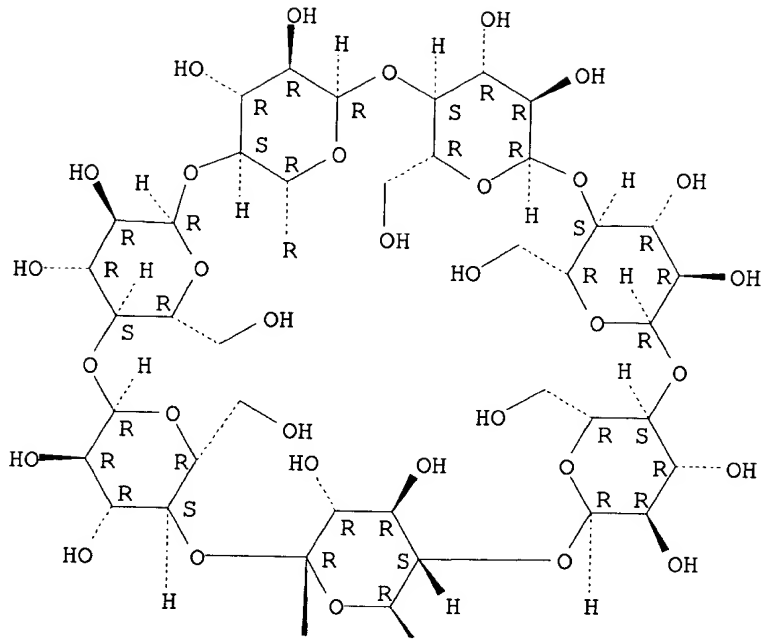
Absolute stereochemistry.



IT **250256-27-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(cholesterylcyclodextrins synthesis and insertion into phospholipid membranes)
RN 250256-27-0 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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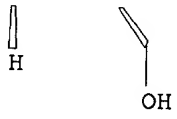

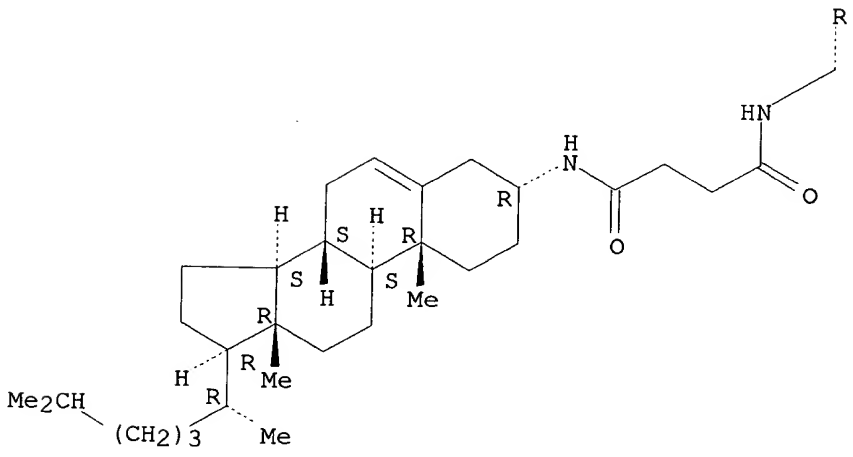

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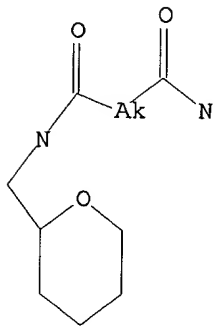

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Structure attributes must be viewed using STN Express query preparation.
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L3 97 SEA FILE=CAPLUS ABB=ON PLU=ON L2
L13 61 SEA FILE=CAPLUS ABB=ON PLU=ON L3 AND CYCLODEXTRIN
L14 34 SEA FILE=CAPLUS ABB=ON PLU=ON L13 NOT PY>1999

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L14 ANSWER 1 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:87172 CAPLUS
DOCUMENT NUMBER: 132:279412
TITLE: Investigation of cyclomaltooligosaccharide-bound 6-(4-methoxyphenyl)imidazo[1,2-a]pyrazin-3(7 H)-one for enhanced chemiluminescence
AUTHOR(S): Teranishi, Katsunori; Tanabe, Saori; Hisamatsu, Makoto; Yamada, Tetsuya
CORPORATE SOURCE: Faculty of Bioresources, Mie University, Tsu, 514-8507, Japan
SOURCE: Luminescence (1999), 14(6), 303-314
CODEN: LUMIFC; ISSN: 1522-7235
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The chemiluminescence compound 2-methyl-6-(4-methoxyphenyl)imidazo[1,2-a]pyrazin-3(7H)-one (MCLA) was attached to cyclomaltooligosaccharides (**cyclodextrins**) through a single spacer by the formation of an amide bond. The properties of oxygen-induced chemiluminescence of the synthesized **cyclodextrin**-bound MCLA were investigated in an aqueous phosphate buffer, pH 8.0. The light-emitting efficiency was remarkably dependent on the kind of bound **cyclodextrin**, spacer length between the MCLA and **cyclodextrin**, and the binding site in **cyclodextrin**. The light-emitting efficiencies of cyclomaltooctaose (γ- **cyclodextrin**)-bound compds. were higher than those of cyclomaltohexaose- or cyclomaltoheptaose-bound compds. Especially, compds. in which MCLA attached to the secondary side of γ- **cyclodextrin** through a short chain showed an up to 44-fold enhancement over that of a non-**cyclodextrin** compound In the current case, the efficiency of single excited-state formation was 23

times greater than that of the non-**cyclodextrin** compound and significantly responsible for greater light-emitting efficiency. The chemiluminescence spectra indicated the wide entrance of the secondary side of γ- **cyclodextrin,** and the short spacer allowed suitable intramol. affinity between the singlet excited-state chromophore moiety and the **cyclodextrin**.

IT **263905-29-9P**

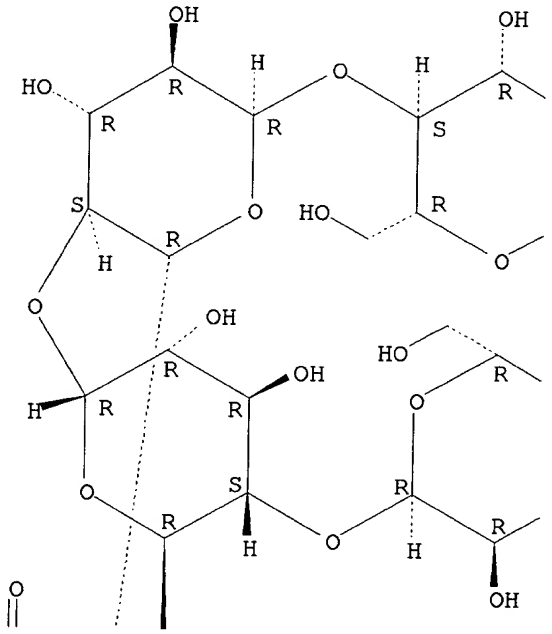
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (investigation of cyclomaltooligosaccharide-bound 6-(methoxyphenyl)imidazo[1,2-a]pyrazinone for enhanced chemiluminescence)

RN 263905-29-9 CAPLUS

CN γ-Cyclodextrin, 6A-deoxy-6A-[[4-[[5-(4-methoxyphenyl)pyrazinyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B



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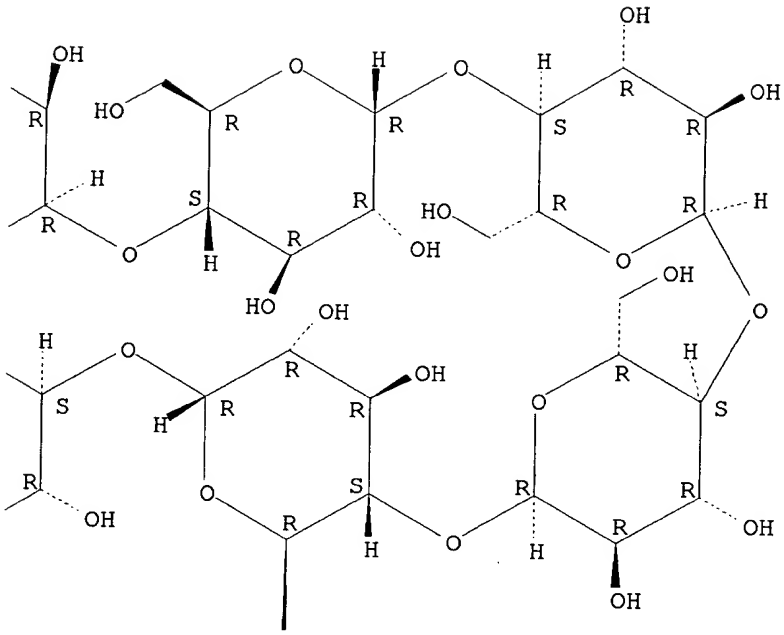

PAGE 2-A

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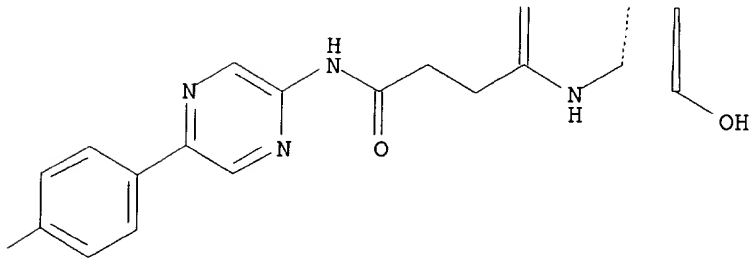
PAGE 2-B



PAGE 2-C

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:56515 CAPLUS
DOCUMENT NUMBER: 132:339156
TITLE: Pharmacological investigations of new peptidocyclodextrins
AUTHOR(S): Pean, C.; Wijkhuisen, A.; Djedaini-Pilard, F.; Creminon, C.; Grassi, J.; Perly, B.
CORPORATE SOURCE: DRECAM/SCM, CEA-Saclay, Gif sur Yvette, F-91191, Fr.
SOURCE: Proceedings of the International Symposium on Cyclodextrins, 9th, Santiago de Comostela, Spain, May 31-June 3, 1998 (1999), Meeting Date 1998, 387-390. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L. Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 68NHAE
DOCUMENT TYPE: Conference
LANGUAGE: English

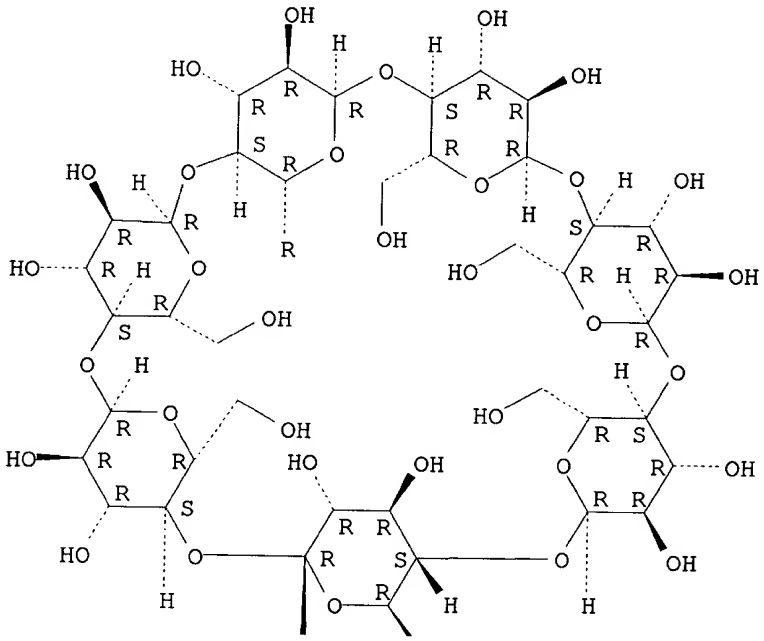
AB In a previous work, the authors synthesized and characterized eight new different peptidocyclodextrins. They are composed with a β- or γ-CD part, and a peptidic part constituted of the neuropeptide Substance P (noted SP, H-Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met-NH2) or one of its derivs., the SP 4-11. Products obtained were β- or γ-CD(Lys3)-SP, β- or γ-CD(Arg1)-SP, di-β- or di-γ-CD(Arg1, Lys3)-SP (noted CD-SP) and β- or γ-CD-SP 4-11. In this communication, the authors report in vitro pharmacol. investigations of these CD-SP. The authors demonstrate the recognition properties of the diverse conjugates by SP receptor mimics (anti SP polyclonal antibodies), by recombinant human NK1 receptor (using binding expts. on CHO transfected cells) and the production of the second messengers inositol phosphates induced by fixation of the CD-SP on the NK1 receptor. These studies form the basis for the next steps: (1) in vivo studies of the CD-SP conjugates, and (2) the evaluation of their potential use as mol. carriers for drug targeting.

IT **251374-54-6 251374-55-7 251374-56-8**
251374-57-9 251374-58-0 251374-59-1
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(pharmacol. investigations of new substance P **cyclodextrins** and potential use in drug targeting)

RN 251374-54-6 CAPLUS
CN L-Methioninamide, 1-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-prolyl-L-glutaminyl-L-glutaminyl-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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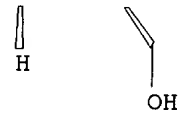

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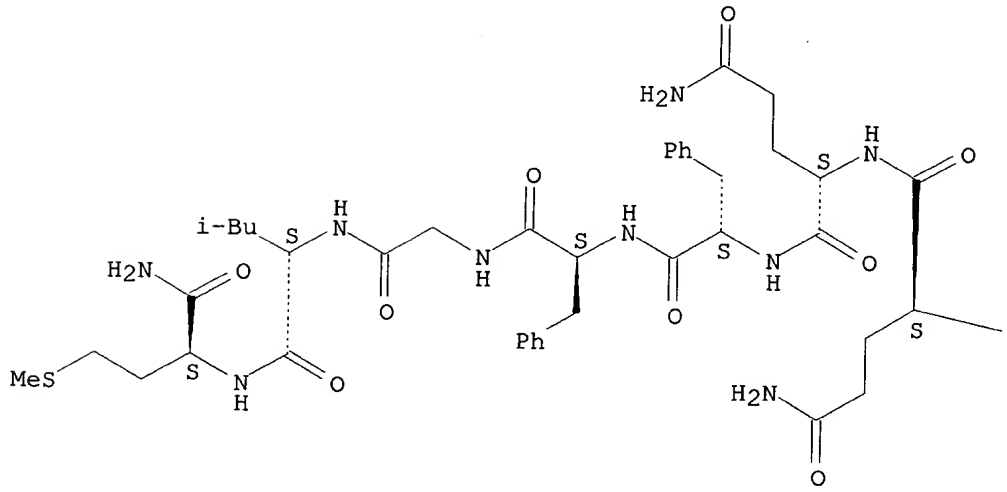

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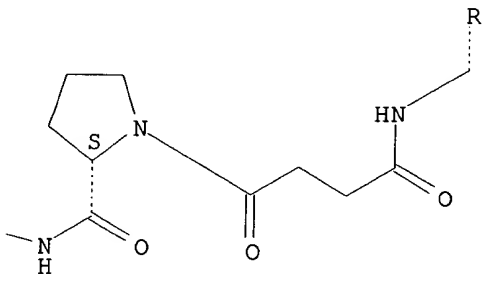

RN 251374-55-7 CAPLUS
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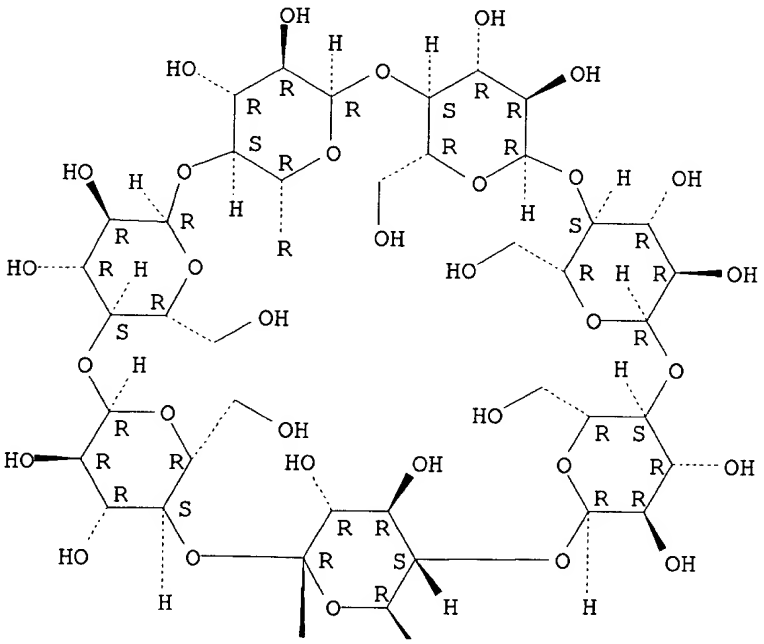
Absolute stereochemistry.

PAGE 1-A



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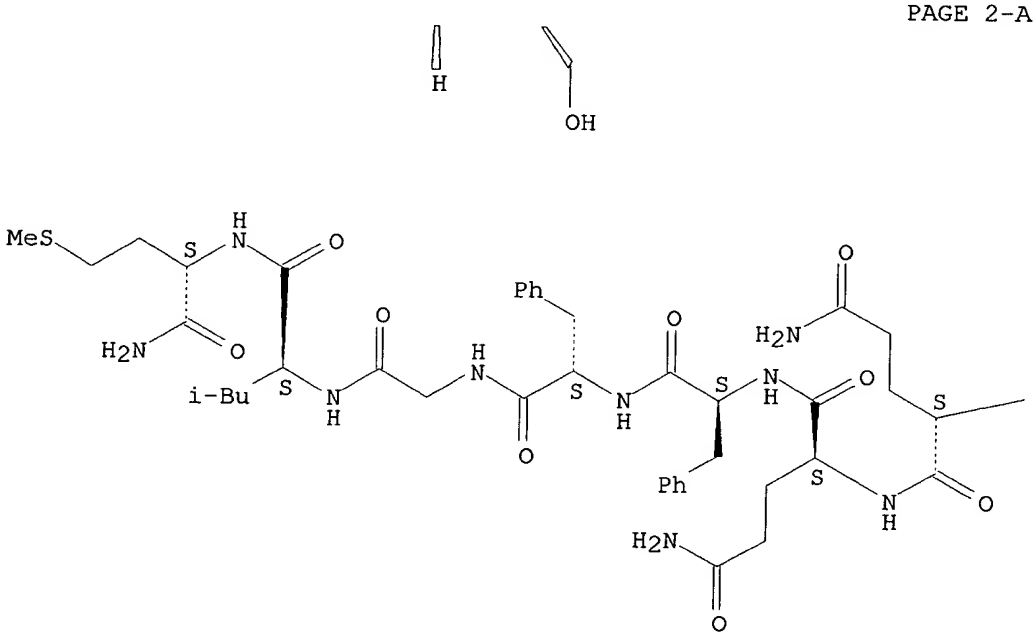

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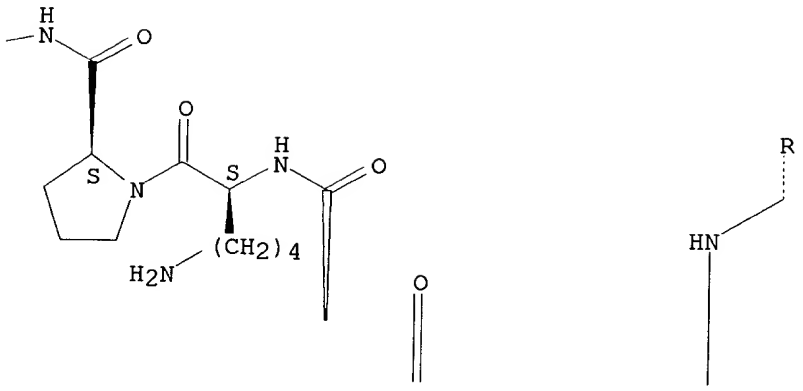
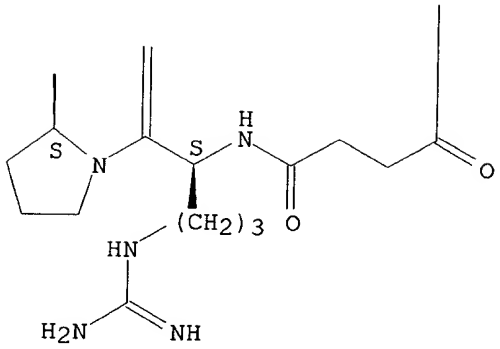


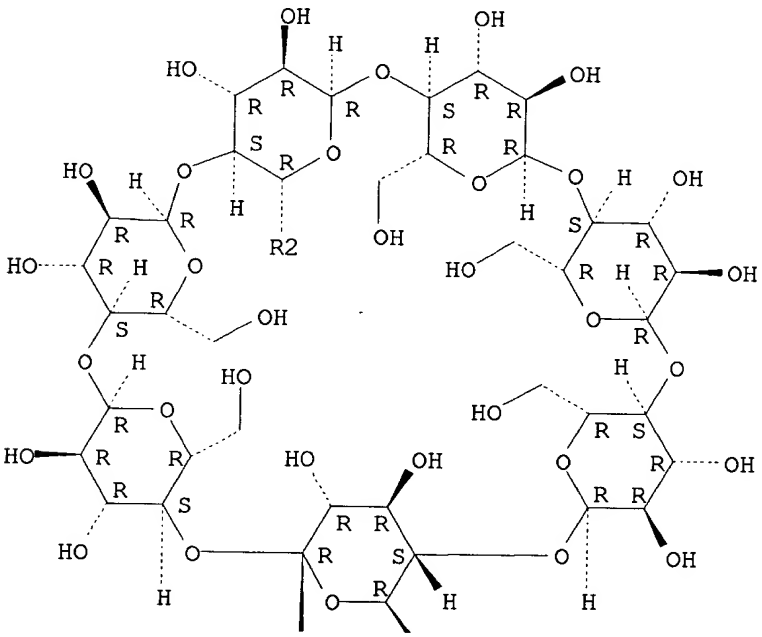


PAGE 3-B

RN 251374-56-8 CAPLUS
CN L-Methioninamide, L-arginyl-L-prolyl-N6-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-lysyl-L-prolyl-L-glutaminyl-L-glutaminyl-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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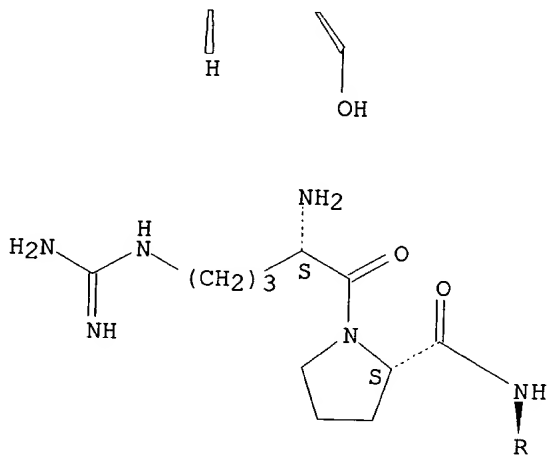

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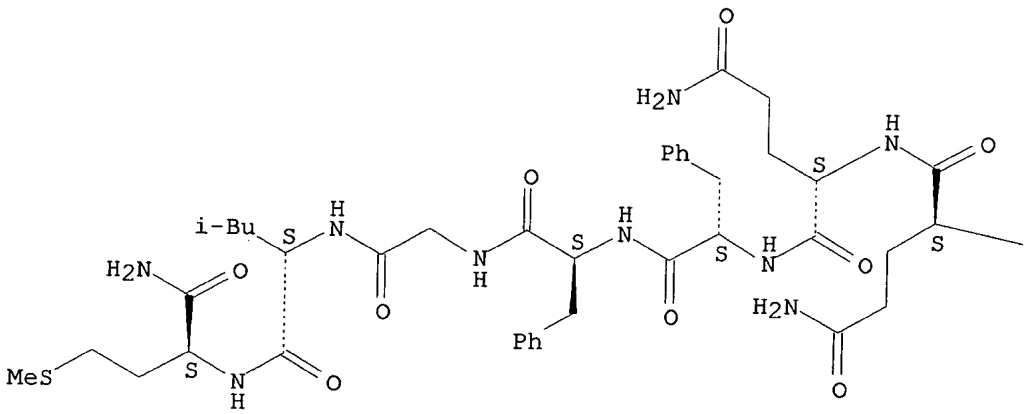

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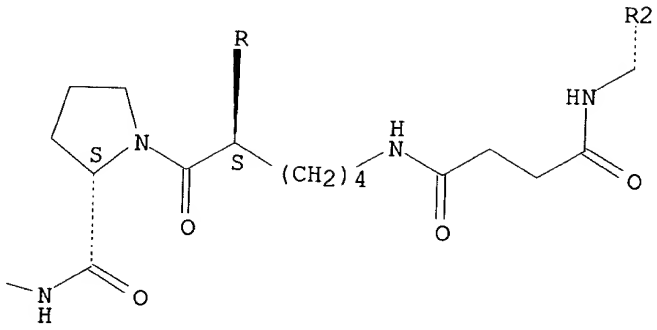

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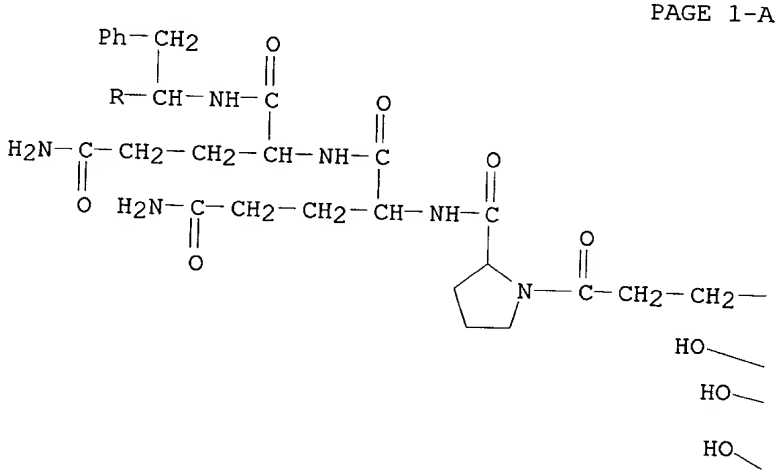
PAGE 1-A



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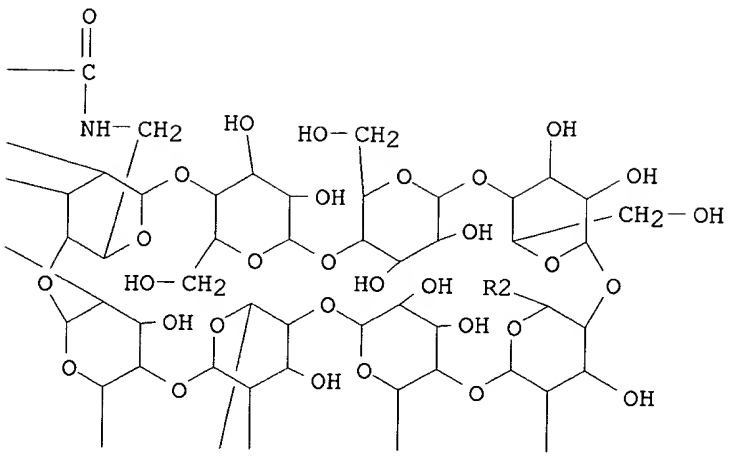

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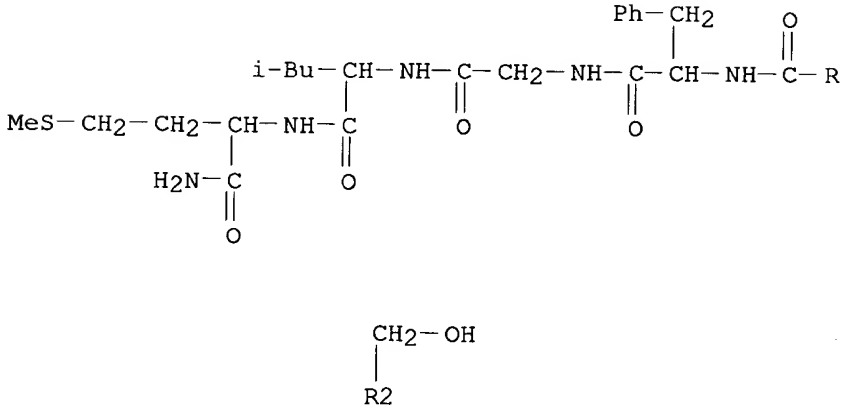

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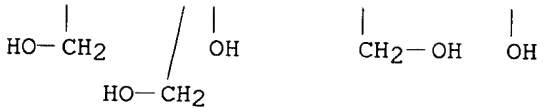

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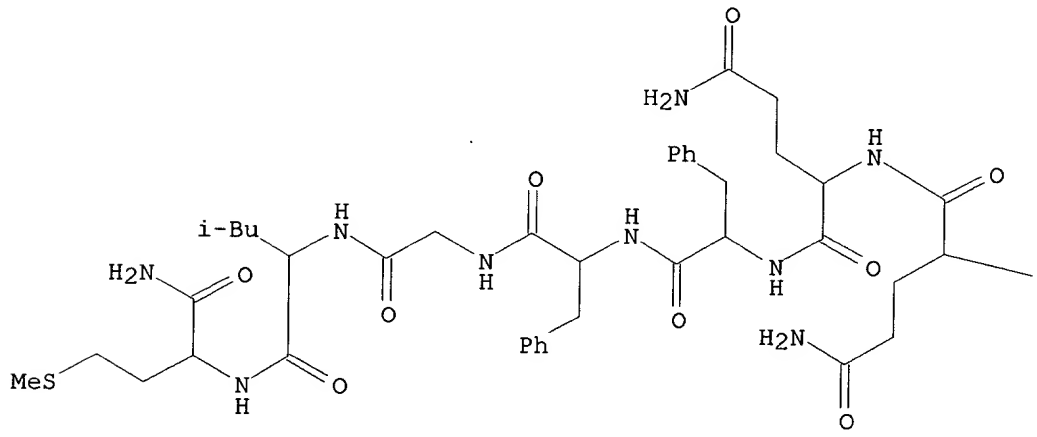
PAGE 1-A



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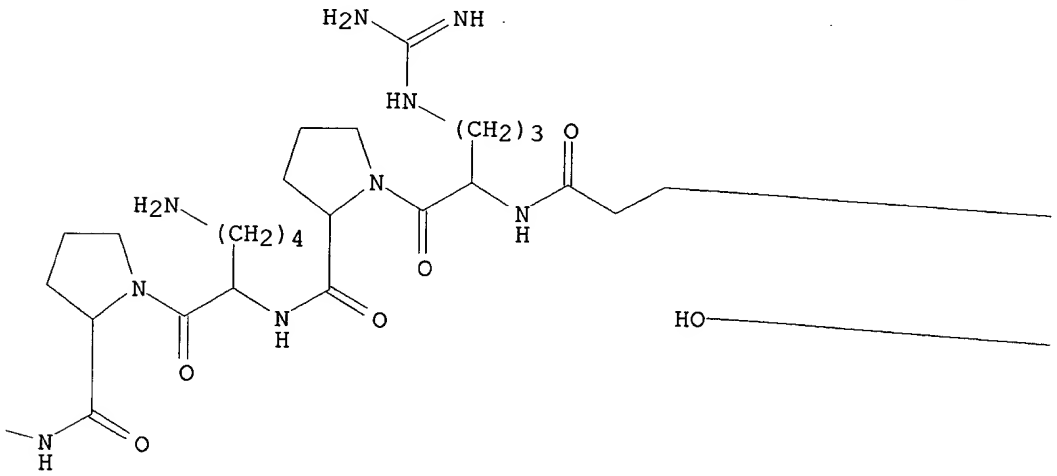

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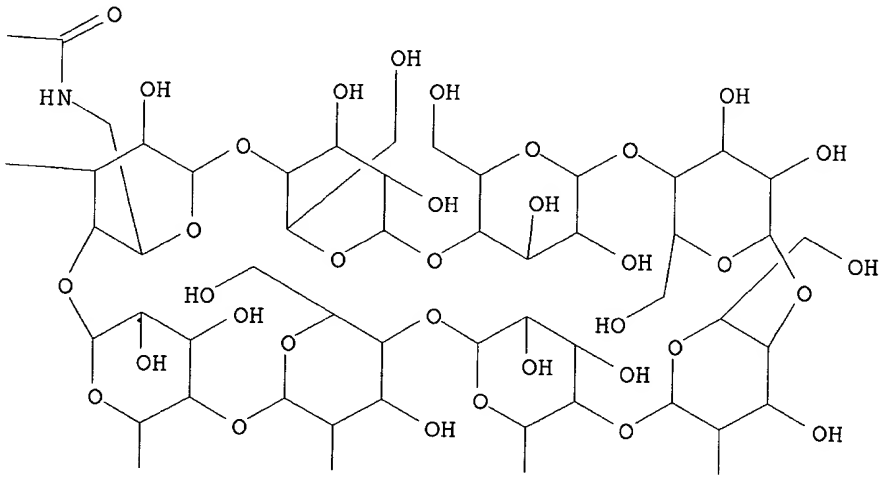

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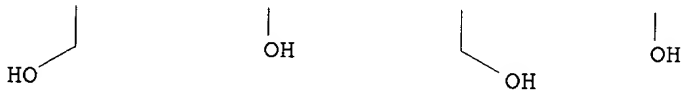

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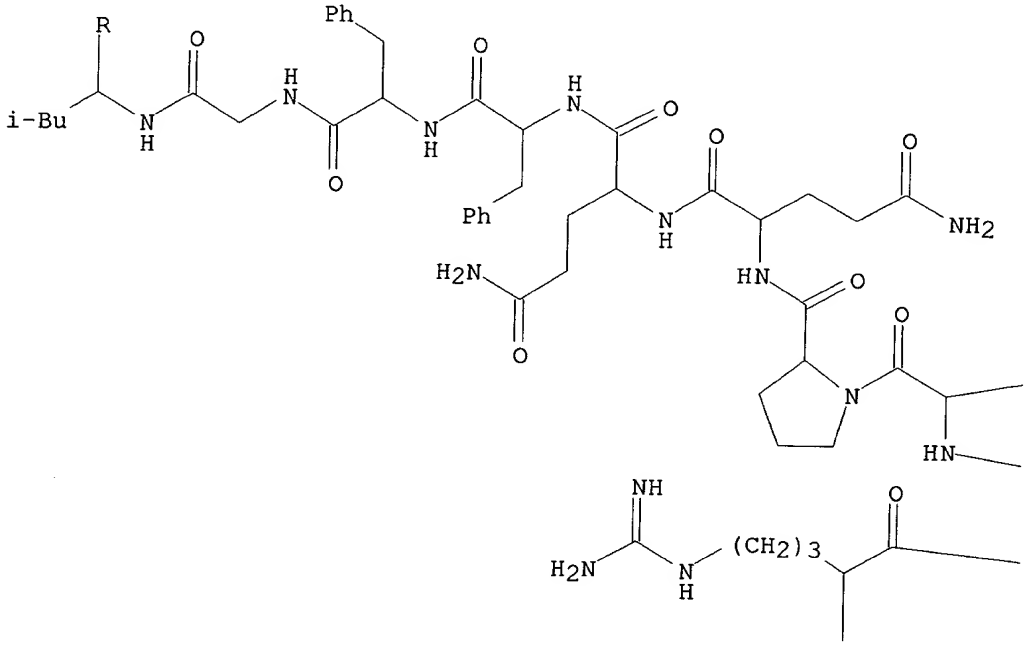
PAGE 1-A



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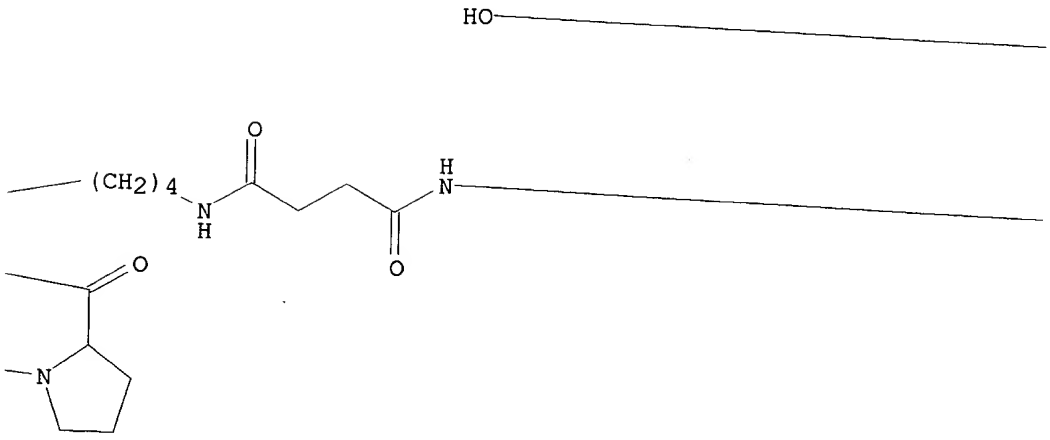

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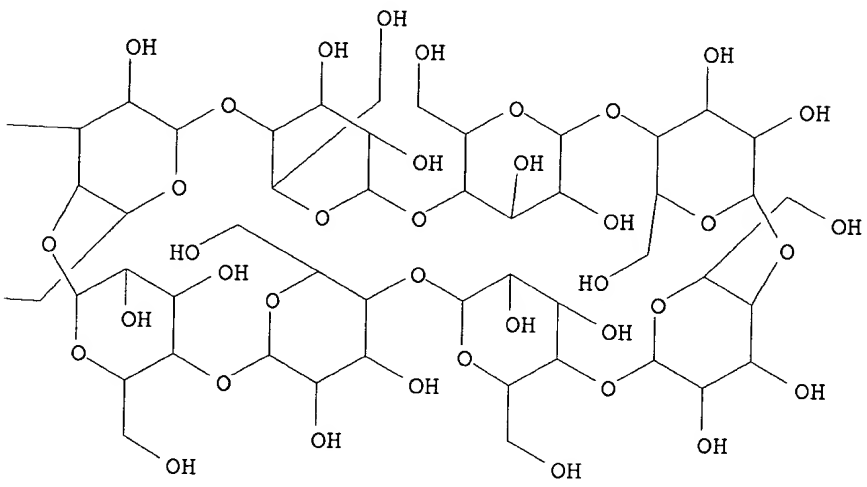

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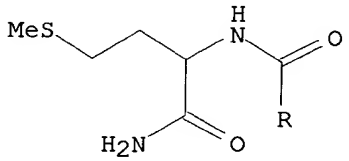


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:56453 CAPLUS
DOCUMENT NUMBER: 132:233519
TITLE: Thiamine-appended **cyclodextrin** dimer as a ligase model
AUTHOR(S): Ikeda, H.; Horimoto, Y.; Nakata, M.; Ueno, A.
CORPORATE SOURCE: Department of Bioengineering, Faculty of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan
SOURCE: Proceedings of the International Symposium on Cyclodextrins, 9th, Santiago de Comostela, Spain, May 31-June 3, 1998 (1999), Meeting Date 1998, 129-132. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L. Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 68NHAE
DOCUMENT TYPE: Conference

LANGUAGE: English

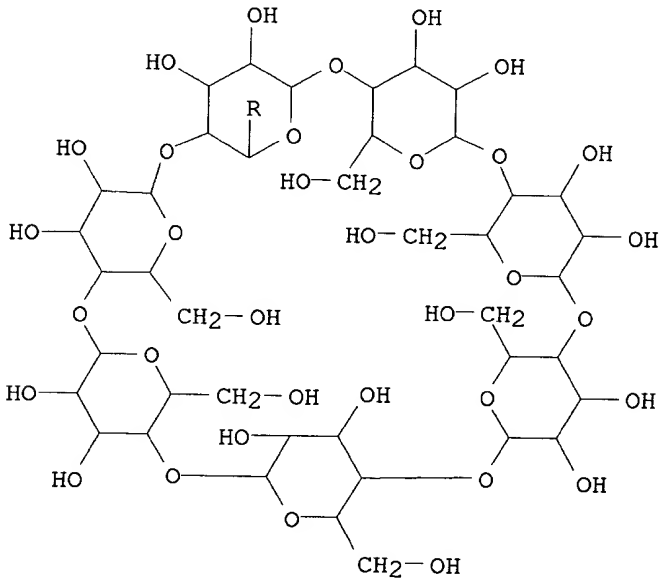
AB In this symposium we present the synthesis and characterization of a thiazolium-appended β- **cyclodextrin** dimer for the benzoin condensation reaction. This enzyme model effectively catalyzes the benzoin condensation of benzaldehyde.

IT **262299-51-4P**
RL: BSU (Biological study, unclassified); CAT (Catalyst use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiamine-appended **cyclodextrin** dimer as a ligase model)

RN 262299-51-4 CAPLUS

CN β-Cyclodextrin, 6A,6'A-[[(2S)-2-[[(4-methylthiazolium-3-yl)acetyl]amino]-1,4-dioxo-1,4-butanediyl]diimino]bis[6-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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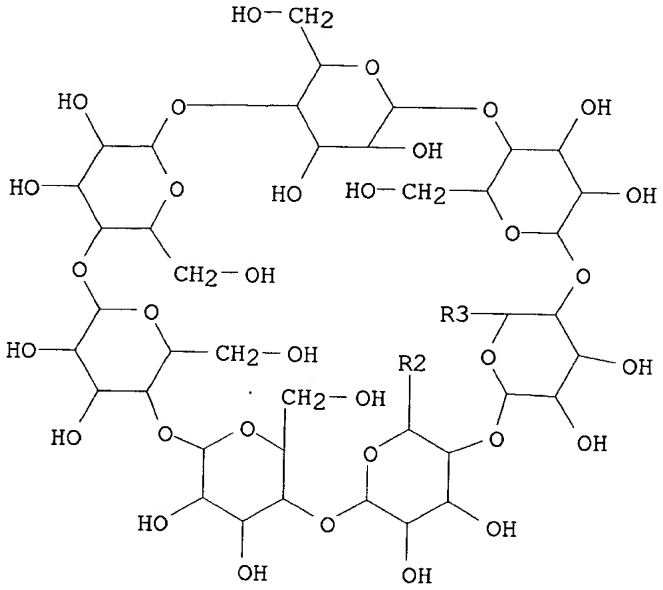

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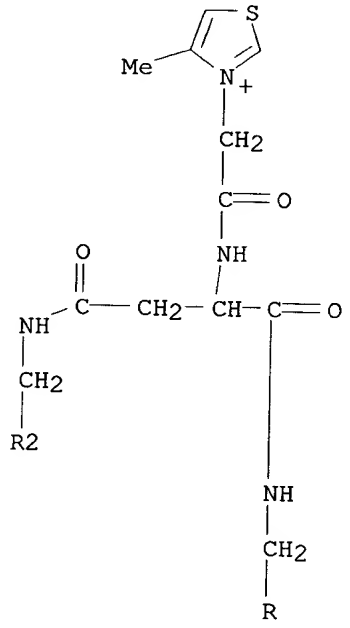

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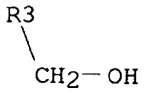


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:56450 CAPLUS
DOCUMENT NUMBER: 132:237271
TITLE: The synthesis of oligosaccharide-branched **cyclodextrins**
AUTHOR(S): Inazu, Toshiyuki; Yamanoi, Takashi; Haneda, Katsuji; Mizuno, Mamoru; Matsuda, Keisuke; Yamazaki, Tomohiro; Takeuchi, Masahito; Tsurui, Hisayo; Hattori, Kenjiro
CORPORATE SOURCE: The Noguchi Institute, Tokyo, 173-0003, Japan
SOURCE: Proceedings of the International Symposium on Cyclodextrins, 9th, Santiago de Comostela, Spain, May 31-June 3, 1998 (1999), Meeting Date 1998, 117-120. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L. Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 68NHAE
DOCUMENT TYPE: Conference
LANGUAGE: English

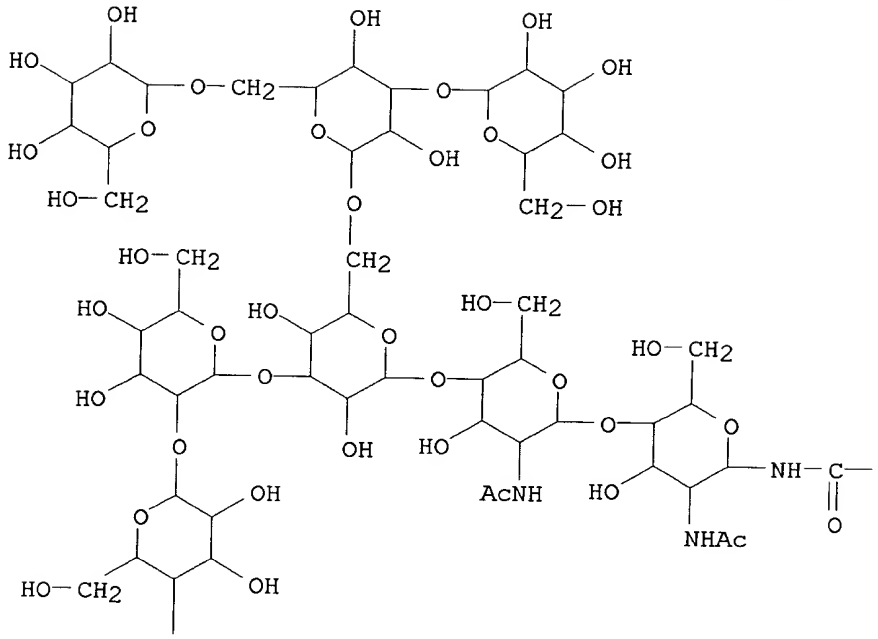
AB Large-scale preparation of oligosaccharide amino acid-branched **cyclodextrins** is reported.

IT **197509-30-1P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(The synthesis of oligosaccharide-branched **cyclodextrins**)

RN 197509-30-1 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[(2S)-4-[[O-α-D-mannopyranosyl-(1→3)-O-[α-D-mannopyranosyl-(1→6)]-O-α-D-mannopyranosyl-(1→6)-O-[O-α-D-mannopyranosyl-(1→2)-α-D-mannopyranosyl-(1→3)]-O-β-D-mannopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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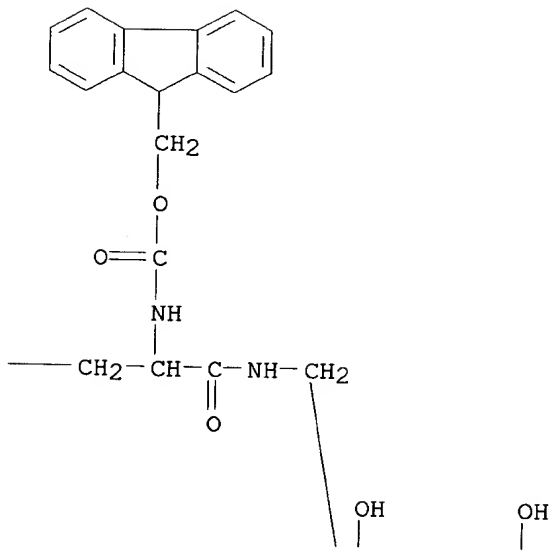

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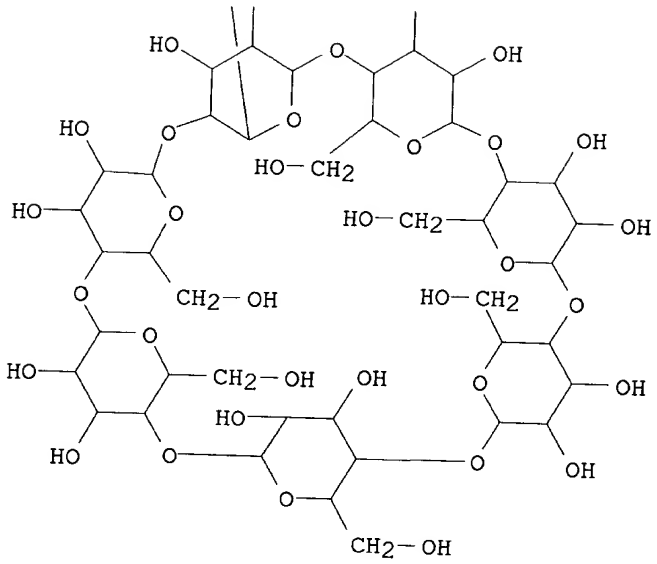
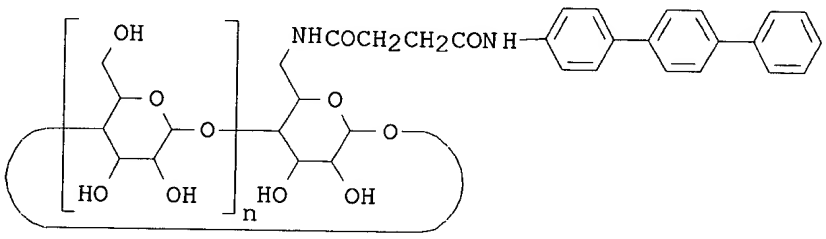
PAGE 2-B



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:744871 CAPLUS
DOCUMENT NUMBER: 132:116833
TITLE: Fluorescent molecular recognition systems of terphenyl modified β- and γ- **cyclodextrins**
AUTHOR(S): Ito, Shigeki; Narita, Miyuki; Hamada, Fumio
CORPORATE SOURCE: Department of Materials-process Engineering, Akita University, Akita, 010-8502, Japan
SOURCE: International Journal of the Society of Materials Engineering for Resources (1999), 7(1), 156-165
CODEN: IMEREB
PUBLISHER: Society of Materials Engineering for Resources of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Terphenyl-modified β- and γ- **cyclodextrin** analogs (I, a n=6; b n=7) were prepared to study their fluorescent mol. sensor ability for organic guests, such as terpenoids or bile acids. These hosts show a pure monomer fluorescence with increasing or decreasing by accommodation of a guest. The extent of fluorescence variation with a guest was used to display the sensing ability of those host mols. Host Ia detects smaller guests such as terpenoids with much higher sensitivity in a 10 volume-% DMSO aqueous solution than those of in a 20 volume-% DMSO aqueous solution However, larger guests such as bile acids were detected with less sensitivity in a 20 volume-% DMSO aqueous solution by Ia. The sensing ability of Ib for a guest examined was hardly effected by the solvent. The mol. sensing system combined with Ia and Ib could be useful method, because their binding behaviors for guests are different, in which the parameter values indicating the sensing ability obtained from Ia were almost pos., whereas the parameter ones for Ib were neg.

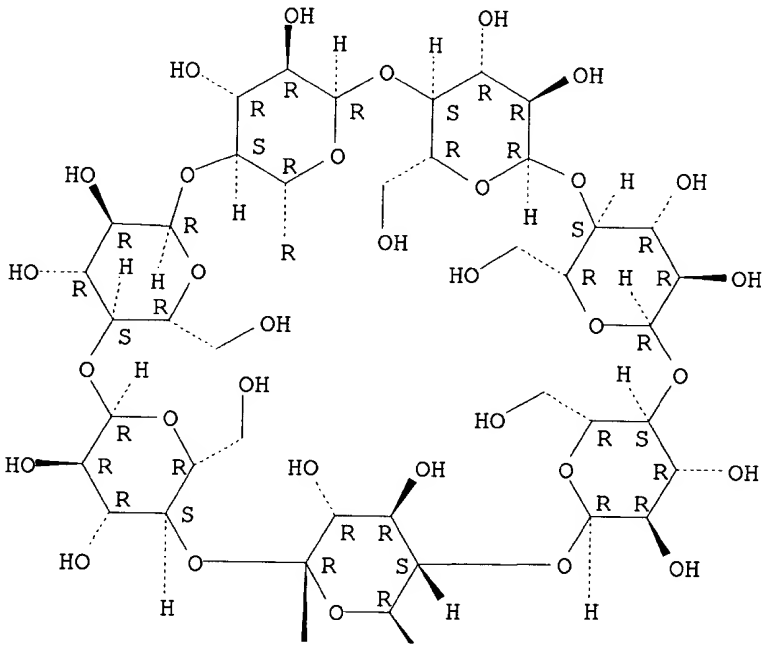
IT **255061-44-0P 255061-45-1P**
RL: ARU (Analytical role, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(fluorescent mol. recognition systems of terphenyl modified β- and γ- **cyclodextrins**)

RN 255061-44-0 CAPLUS

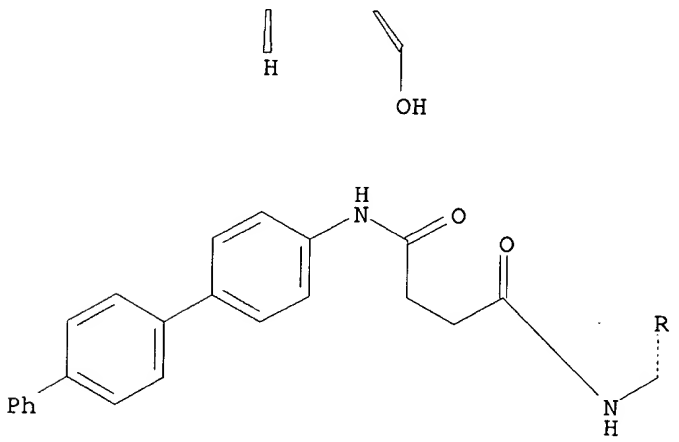
CN β-Cyclodextrin, 6A-deoxy-6A-[[1,4-dioxo-4-([1,1':4',1''-terphenyl]-4-ylamino)butyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



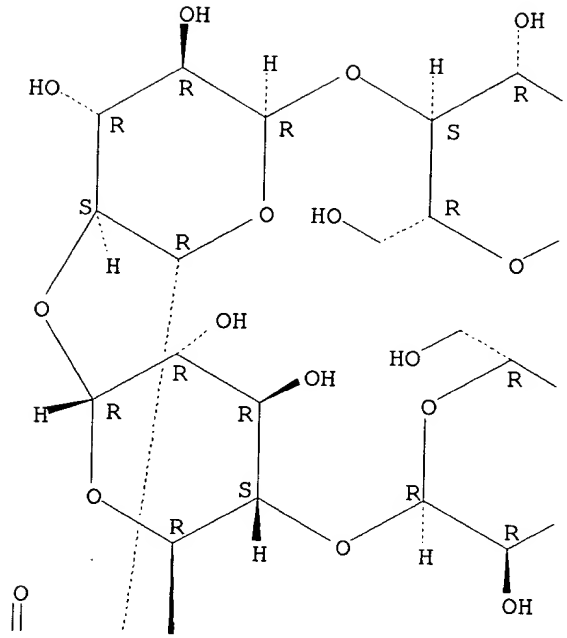
PAGE 2-A



RN 255061-45-1 CAPLUS
CN γ-Cyclodextrin, 6A-deoxy-6A-[[1,4-dioxo-4-([1,1':4',1''-terphenyl]-4-ylamino)butyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B



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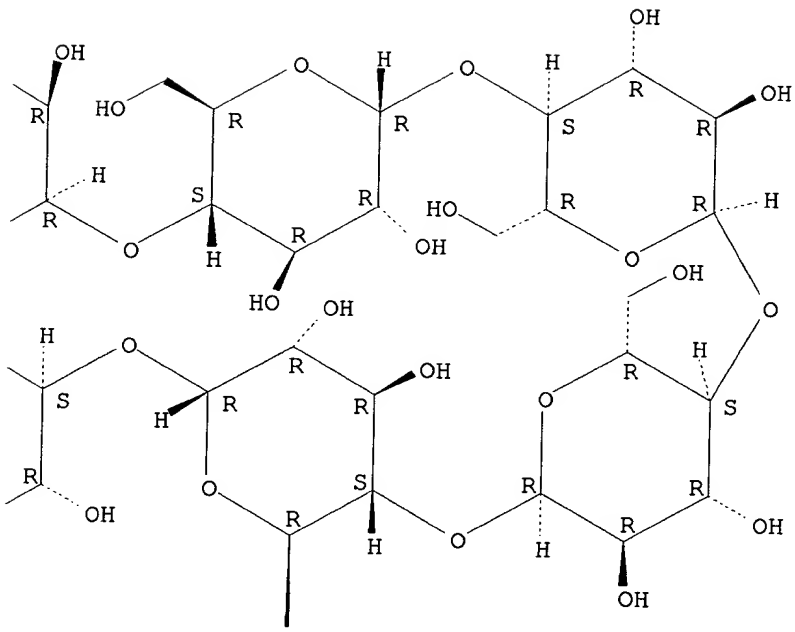

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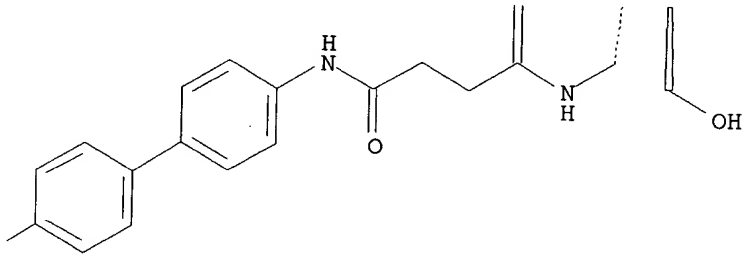
PAGE 2-B



PAGE 2-C

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 34 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:669963 CAPLUS

DOCUMENT NUMBER: 132:122826

TITLE: Preparation and guest binding of novel β-**cyclodextrin** dimers linked with various sulfur-containing linker moieties

AUTHOR(S): Yamamura, Hatsuo; Yamada, Shinichi; Kohno, Keiko; Okuda, Nozomi; Araki, Shuki; Kobayashi, Kyoko; Katakai, Ryoichi; Kano, Kazuaki; Kawai, Masao

CORPORATE SOURCE: Showa-ku, Gokiso-cho, Department of Applied Chemistry, Nagoya Institute of Technology, Nagoya, 466-8555, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1999), (20), 2943-2948
CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:122826

AB **Cyclodextrin** dimers with sulfur-containing linkers, namely a thiodipropanamide, a dithiodipropanamide, a thiodiethanamide, or a dithiodiethanamide linker, were synthesized by a reaction of 6-amino-6-deoxycycloheptaose with the corresponding dicarboxylic acids. For their preparation, dicyclohexylcarbodiimide, 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide and (benzotriazol-1-yloxy)tripyrrolidinophosphonium hexafluorophosphate were examined as coupling reagents. 1H NMR studies of the dimers suggested an intramol. inclusion of the linker moiety to the **cyclodextrin** cavity, which affected the complexation of aryl sulfonate guest mols.

IT **256430-98-5P 256430-99-6P 256431-00-2P**
256431-02-4P 256444-50-5P 256444-51-6P
256444-52-7P 256444-53-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and guest binding of novel β- **cyclodextrin** dimers linked with various sulfur-containing linker moieties)

RN 256430-98-5 CAPLUS

CN β-Cyclodextrin, 6A,6'A-[(1,6-dioxo-1,6-hexanediyl)diimino]bis[6A-deoxy-, compd. with sodium 4-[[4-(dimethylamino)phenyl]azo]benzenesulfonate (1:1) (9CI) (CA INDEX NAME)

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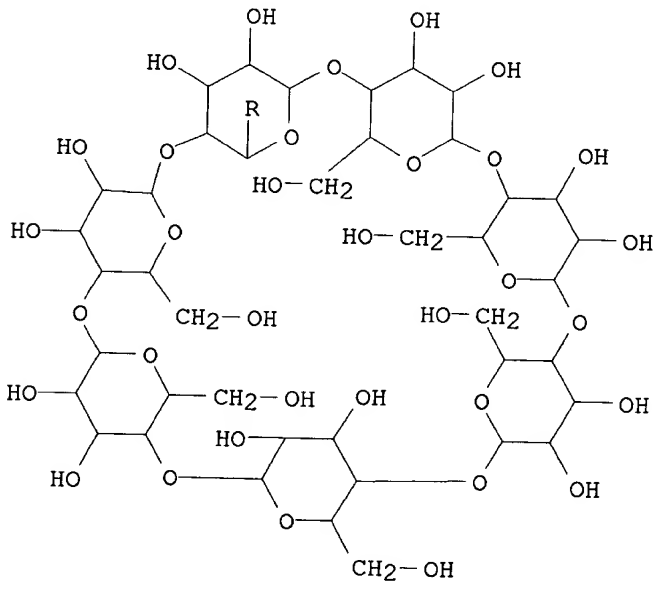
CRN 256430-97-4
CMF C90 H148 N2 O70

PAGE 1-A



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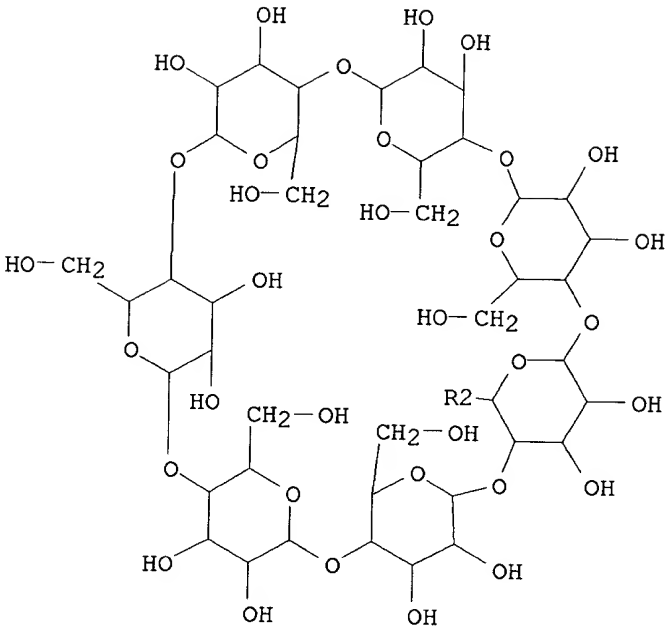

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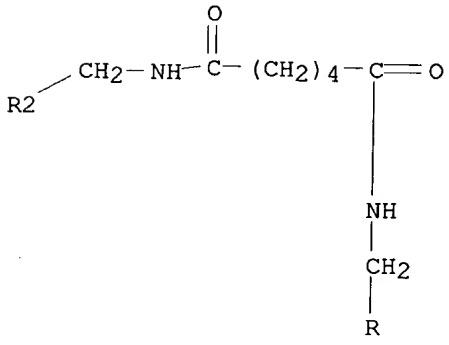
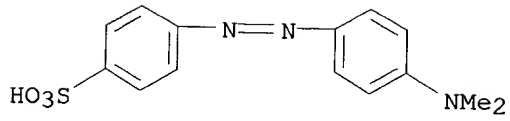


CM 2

CRN 547-58-0
CMF C14 H15 N3 O3 S . Na



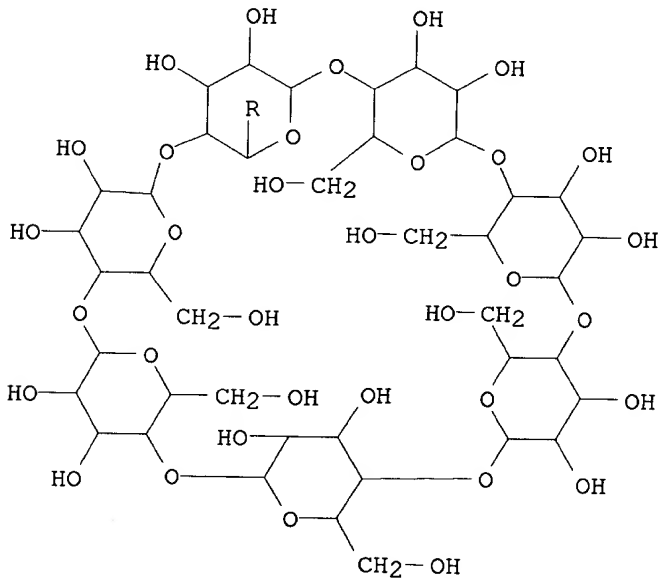
● Na

RN 256430-99-6 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,6-dioxo-1,6-hexanediyl)diimino]bis[6A-deoxy-, compd. with 4-[[4-(phenylamino)phenyl]azo]benzenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 256430-97-4
CMF C90 H148 N2 O70

PAGE 1-A



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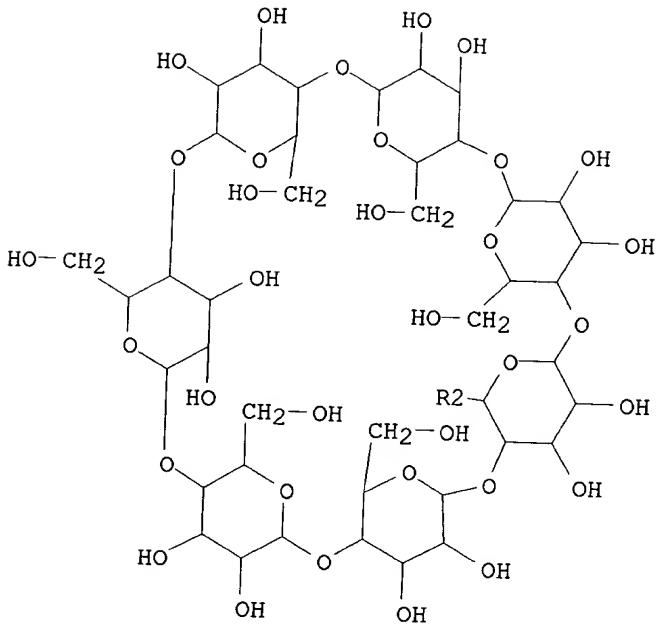

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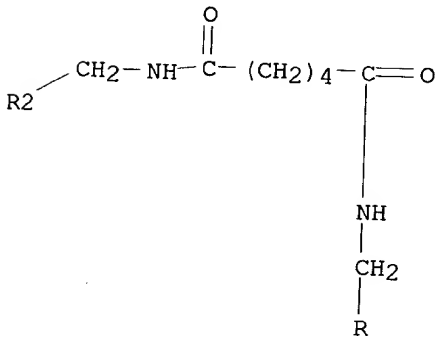
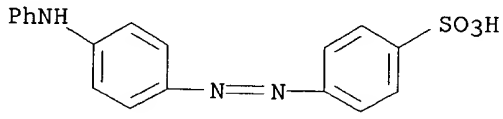


CM 2

CRN 554-73-4
CMF C18 H15 N3 O3 S . Na



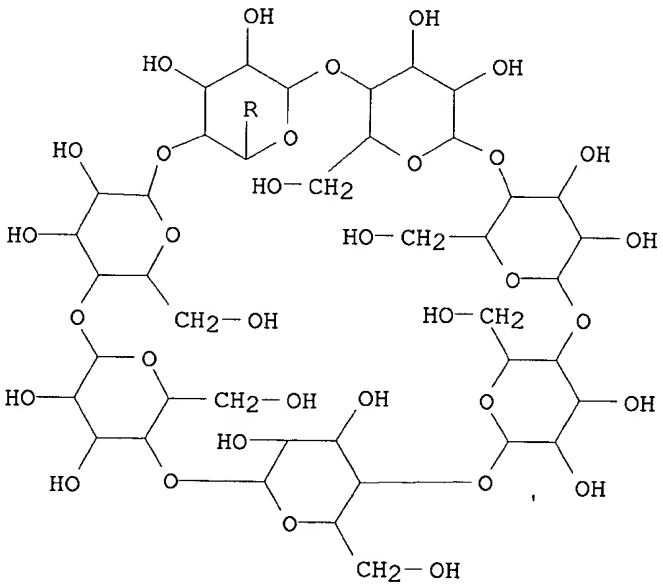
● Na

RN 256431-00-2 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,6-dioxo-1,6-hexanediyl)diimino]bis[6A-deoxy-, compd. with 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 256430-97-4
CMF C90 H148 N2 O70

PAGE 1-A



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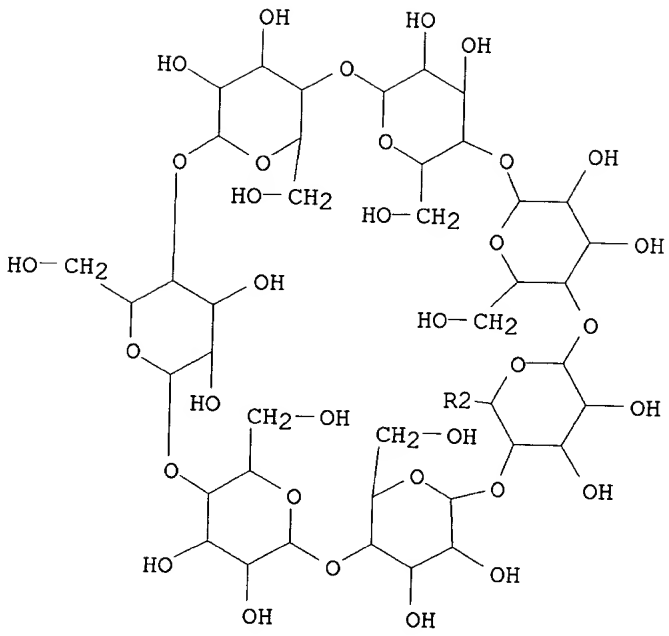

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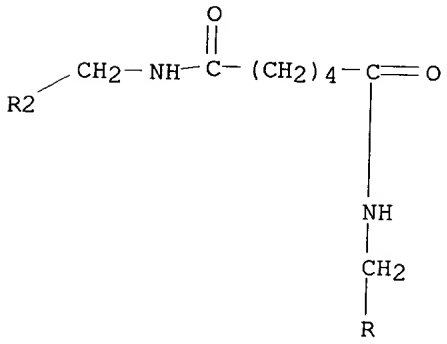

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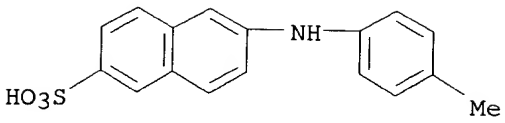
CRN 53313-85-2
CMF C17 H15 N O3 S . Na



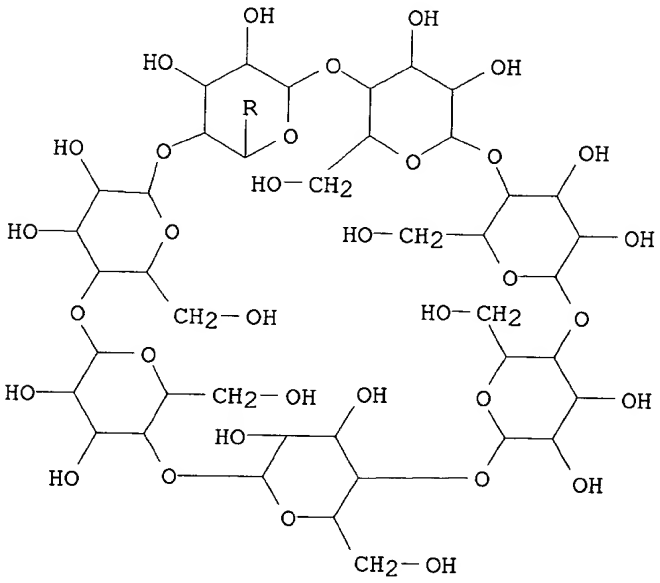
● Na

RN 256431-02-4 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,6-dioxo-1,6-hexanediyl)diimino]bis[6A-deoxy-, compd. with 6-[[4-(1,1-dimethylethyl)phenyl]amino]-2-naphthalenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 256430-97-4
CMF C90 H148 N2 O70

PAGE 1-A



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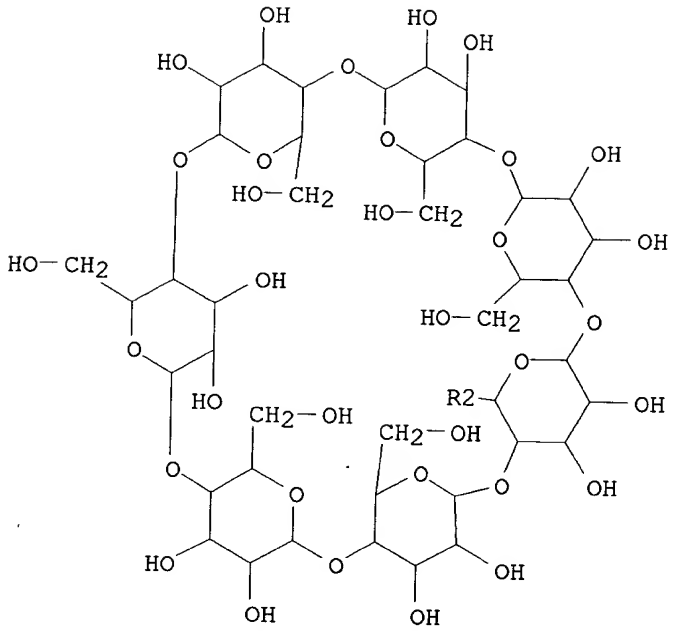

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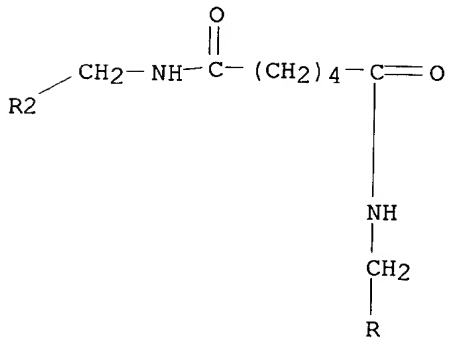

CM 2

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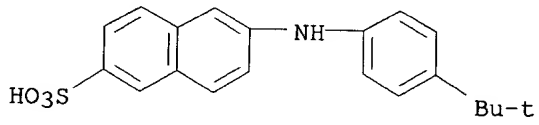
CMF C20 H21 N O3 S . Na



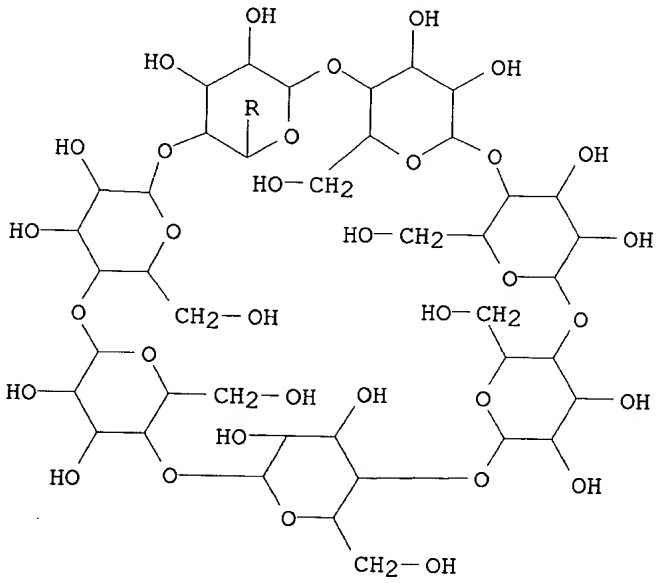
● Na

RN 256444-50-5 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy-, compd. with sodium 4-[[4-(dimethylamino)phenyl]azo]benzenesulfonate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 130912-24-2
CMF C89 H146 N2 O70

PAGE 1-A



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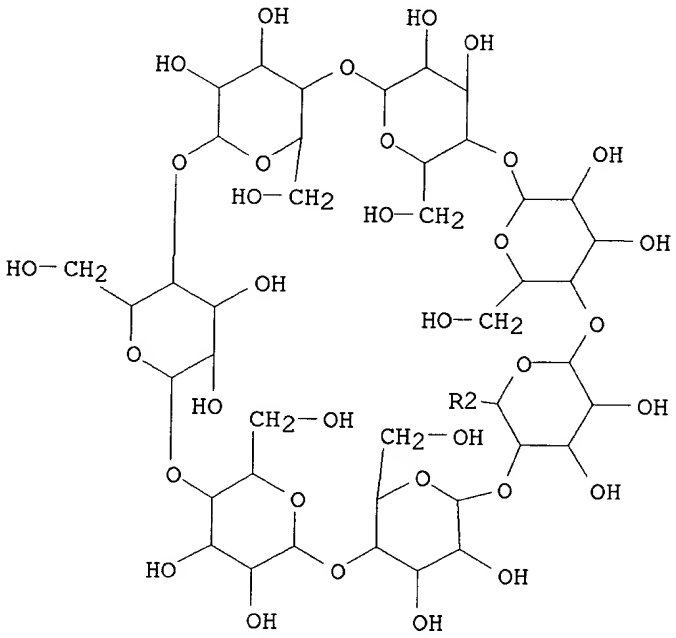

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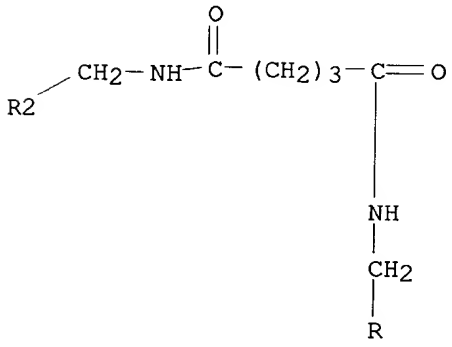

CM 2

CRN 547-58-0
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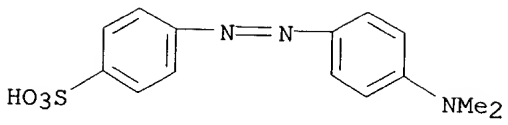


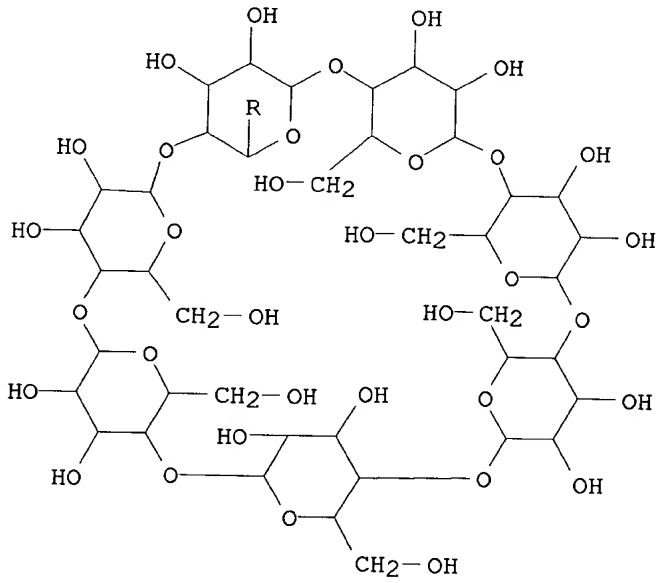
● Na

RN 256444-51-6 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy-, compd. with 4-[[4-(phenylamino)phenyl]azo]benzenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

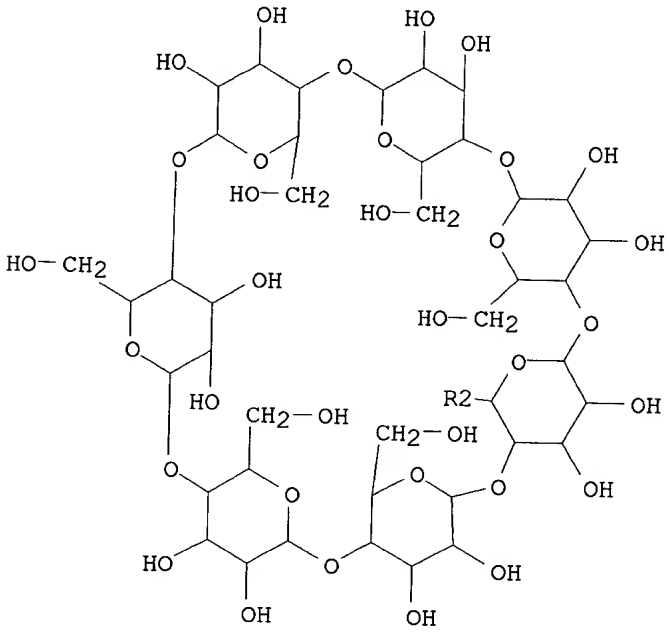
CM 1

CRN 130912-24-2
CMF C89 H146 N2 O70

PAGE 1-A



PAGE 2-A



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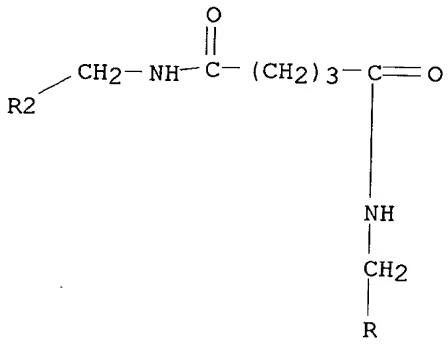
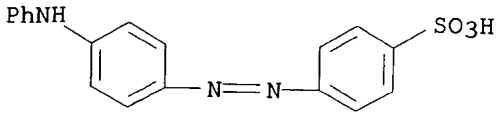


CM 2

CRN 554-73-4
CMF C18 H15 N3 O3 S . Na



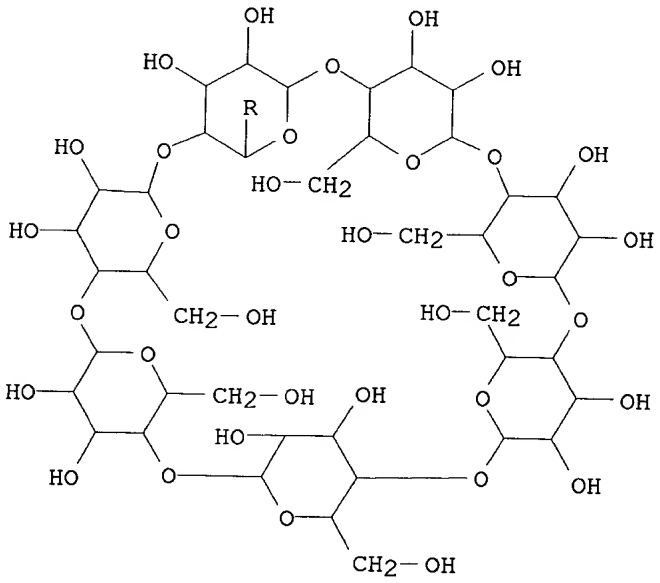
● Na

RN 256444-52-7 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy-, compd. with 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 130912-24-2
CMF C89 H146 N2 O70

PAGE 1-A



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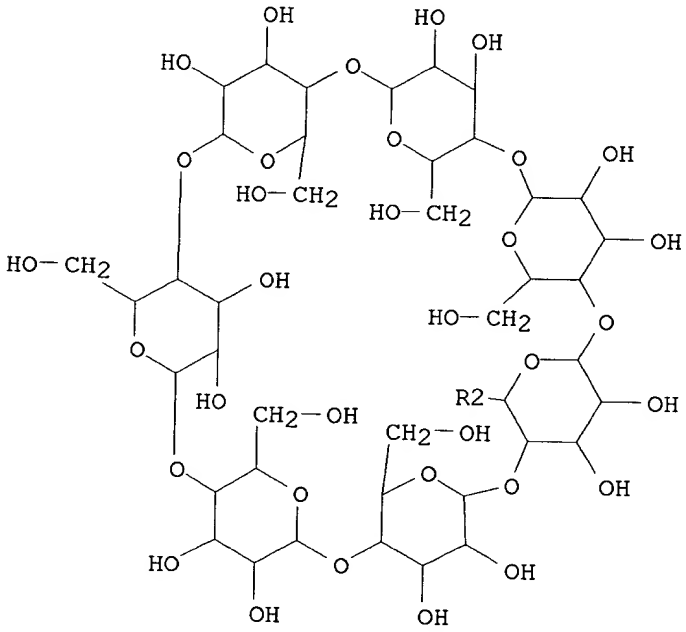

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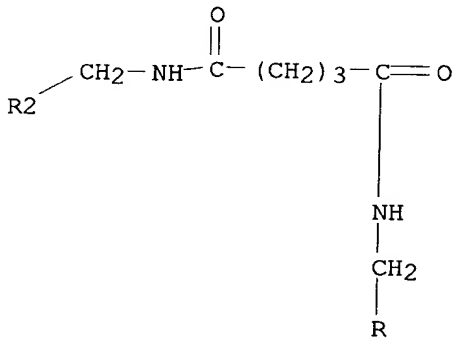

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CRN 53313-85-2
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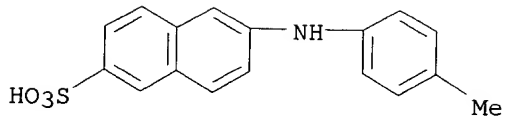

● Na

RN 256444-53-8 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy-, compd. with 6-[[4-(1,1-dimethylethyl)phenyl]amino]-2-naphthalenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

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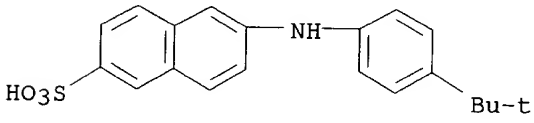
CRN 144796-65-6
CMF C20 H21 N O3 S . Na

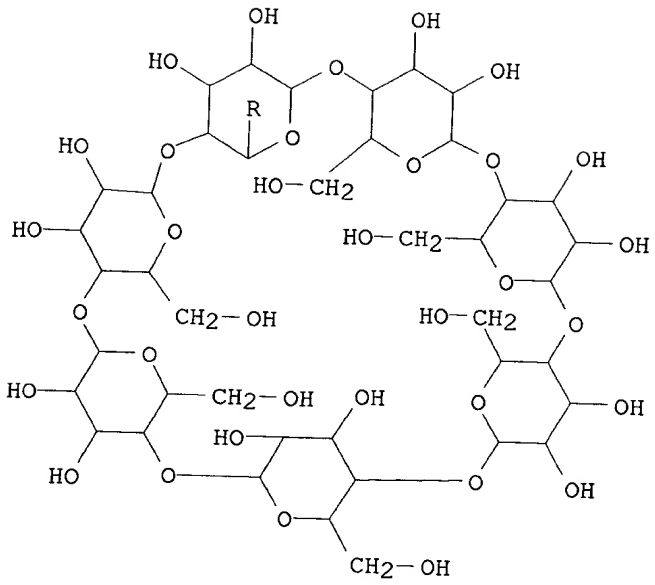


● Na

CM 2

CRN 130912-24-2
CMF C89 H146 N2 O70

PAGE 1-A



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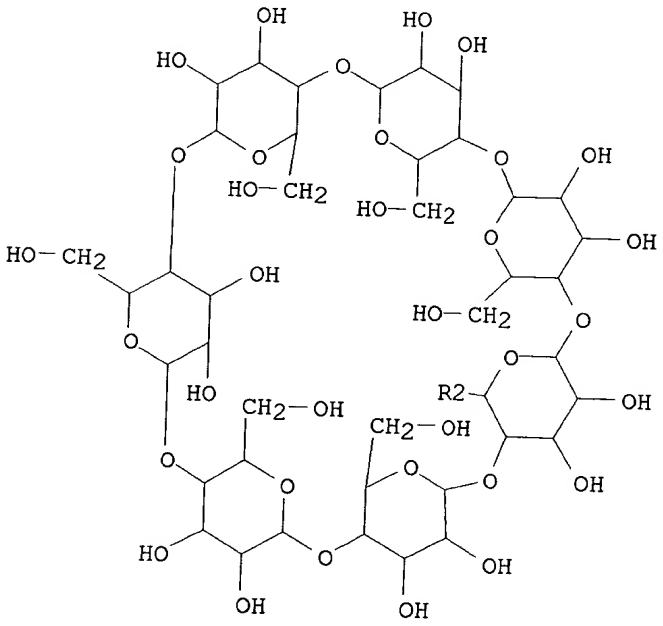

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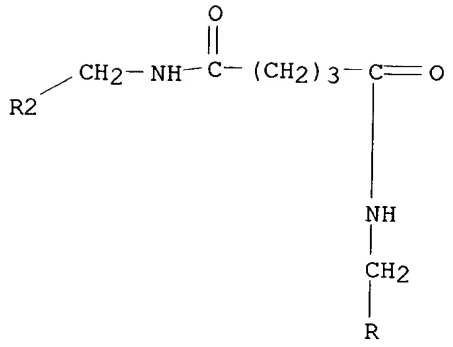
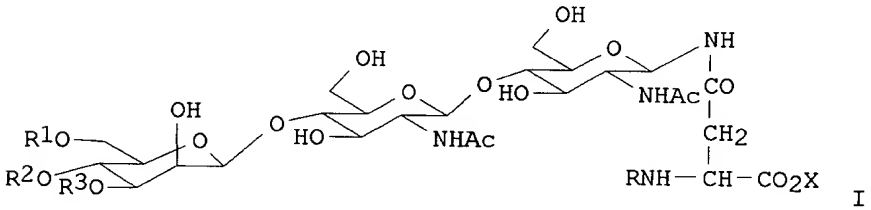


REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:596919 CAPLUS
DOCUMENT NUMBER: 131:243592
TITLE: Preparation of sugar chain-linked asparagine active ester derivative and the synthetic intermediate
INVENTOR(S): Inazu, Toshiyuki; Mizuno, Masamori
PATENT ASSIGNEE(S): Noguchi Research Institute, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11255807	A2	19990921	JP 1998-82882	19980313

PRIORITY APPLN. INFO.: JP 1998-82882 19980313
OTHER SOURCE(S): MARPAT 131:243592
GI



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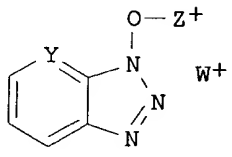


II

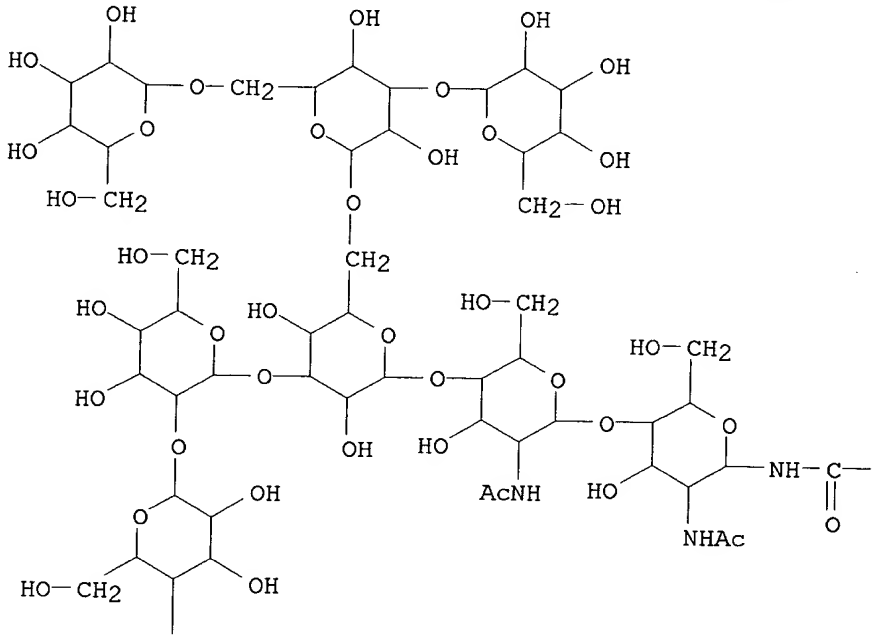
AB Disclosed are the title compds. (I; R = Fmoc; R1, R2, R3 = H, monosaccharide, sugar chain; X = Q; wherein Y = CH, N) are prepared by reaction of benzotriazole derivative [II; Z+ = C(:N+Me2)NMe2, tris(pyrrolidino)phosphonium; Y = same as above] in a aprotic polar solvent with an intermediate (I; R = Fmoc, X = OH; R1, R2, R3, Y = same as above) which is prepared by 9-fluorenylmethoxycarbonylation of sugar chain-linked asparagine obtained by protease treatment of glycoprotein. These compds. are useful for drugs or agrochems. (no data). Thus, 62.4 mg of egg white albumin-derived sugar chain-linked asparagine H-Asn(GlcNAc2Man6)-OH [I; R = H, R1 = Man(α1→6)[Man(α1. fwdarw.3)]Man(α1→6), R2 = H, R3 = Man(α1→2)-Man(α1→3), X = OH] was dissolved in 6.2 mL 1% aqueous NaHCO3, treated dropwise with a solution of 16 mg N-(9-fluorenyloxycarbonyloxy)succinimide (Fmoc-OSu) in 10 mL 1,4-dioxane, and stirred overnight to give 63 mg I [R = Fmoc, R1 = Man(α1→6)[Man(α1→3)]Man(.alpha .1→6), R2 = H, R3 = Man(α1→2)-Man(α1→3), X = OH]. To a solution of the latter compound (5.0 mg) in 2 mL N-methyl-2-pyrrolidone were added 2.9 μL 1 M diisopropylethylamine/N-methyl-2-pyrrolidone solution and 1.5 mg benzotriazol-1-yloxy-tris(pyrrolidino)phosphonium hexafluorophosphate, and 3.3 mg 6-monoamino-β- **cyclodextrin** for capturing the active ester formed, and resulting mixture was stirred overnight to give 74% **cyclodextrin**-linked sugar chain [I; R = Fmoc, R1 = Man(α1→6)[Man(α1→3)]Man(α1→6), R2 = H, R3 = Man(α1→2)-Man(α1→3), X = 6-monoamino-β- **cyclodextrin** residue].

IT **197509-30-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of sugar chain-linked asparagine active ester derivative and synthetic intermediate)

RN 197509-30-1 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[(2S)-4-[[O-α-D-mannopyranosyl-(1→3)-O-[α-D-mannopyranosyl-(1→6)]-O-α-D-mannopyranosyl-(1→6)-O-[O-α-D-mannopyranosyl-(1→2)-α-D-mannopyranosyl-(1→3)]-O-β-D-mannopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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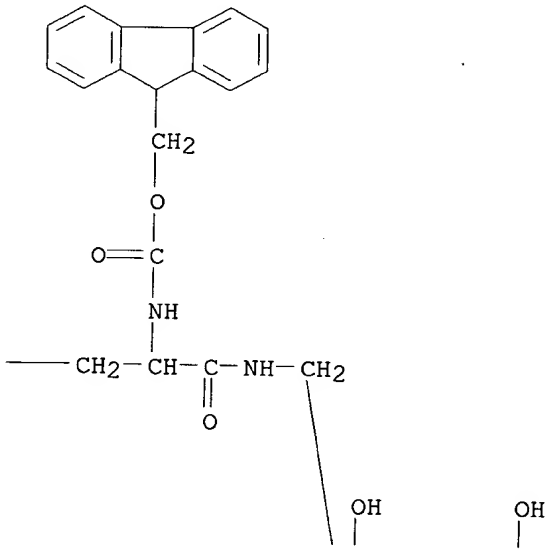

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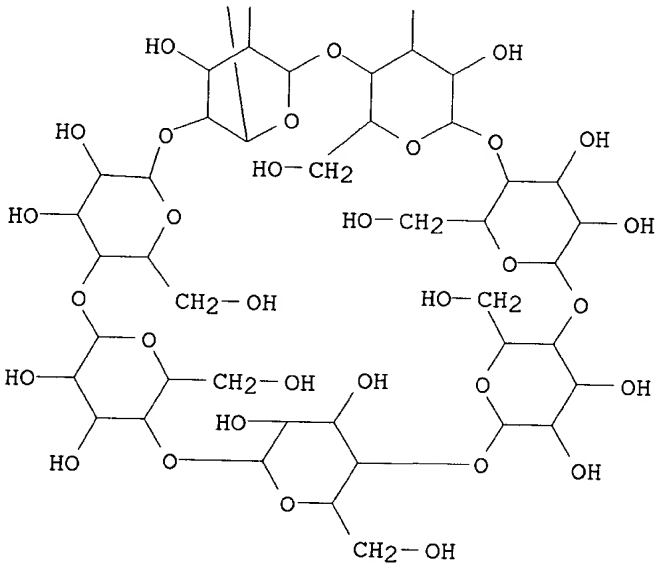
PAGE 2-B



L14 ANSWER 8 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:568419 CAPLUS
DOCUMENT NUMBER: 131:351563
TITLE: Cholesteryl-**cyclodextrins**: synthesis and insertion into phospholipid membranes
AUTHOR(S): Auzely-Velty, R.; Perly, B.; Tache, O.; Zemb, T.; Jehan, P.; Guenot, P.; Dalbiez, J.-P.; Djedaini-Pilard, F.
CORPORATE SOURCE: CEA Saclay, Service de Chimie Moleculaire DRECAM, Gif sur Yvette, F-91191, Fr.
SOURCE: Carbohydrate Research (1999), 318(1-4), 82-90
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 6I-(Cholest-5-en-3β-yloxycarbonyl)amino-6I-deoxycyclomaltoheptaose and 6I-(cholest-5-en-3α-ylamido)succinylamido-6I-deoxycyclomaltoheptaose were synthesized and fully characterized by NMR spectroscopy expts. and mass spectrometry anal. Incorporation of these monosubstituted amphiphilic **cyclodextrins** into phospholipid bilayers was investigated using small-angle X-ray scattering, differential scanning calorimetry and 31P NMR. Different modes of incorporation depending on the spacer length between the **cyclodextrin** and

cholesterol moieties were observed

IT **250256-28-1P**

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(cholesterylcyclodextrins synthesis and insertion into phospholipid membranes)

RN 250256-28-1 CAPLUS

CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy-, compd. with (7R)-4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-3,5,9-trioxa-4-phosphatricosan-1-aminium inner salt 4-oxide (1:1) (9CI) (CA INDEX NAME)

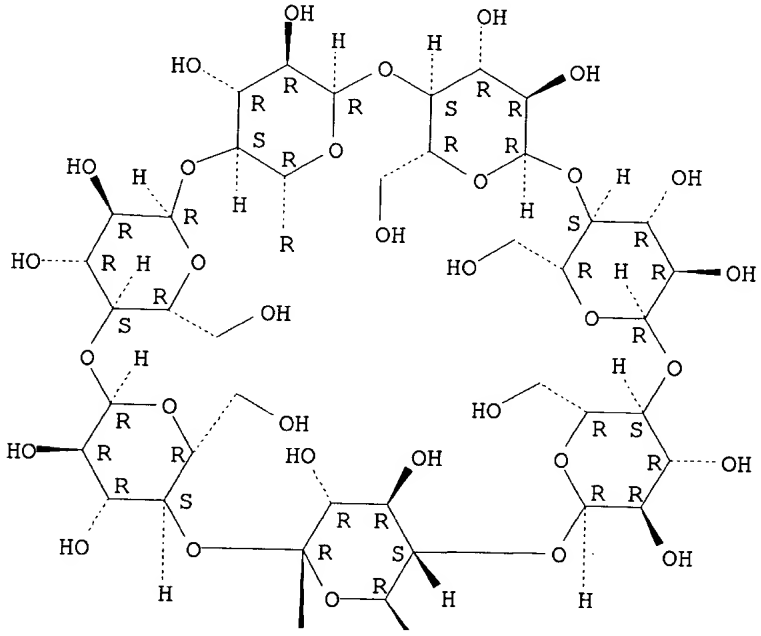
CM 1

CRN 250256-27-0

CMF C73 H120 N2 O36

Absolute stereochemistry.

PAGE 1-A



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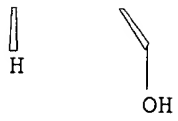
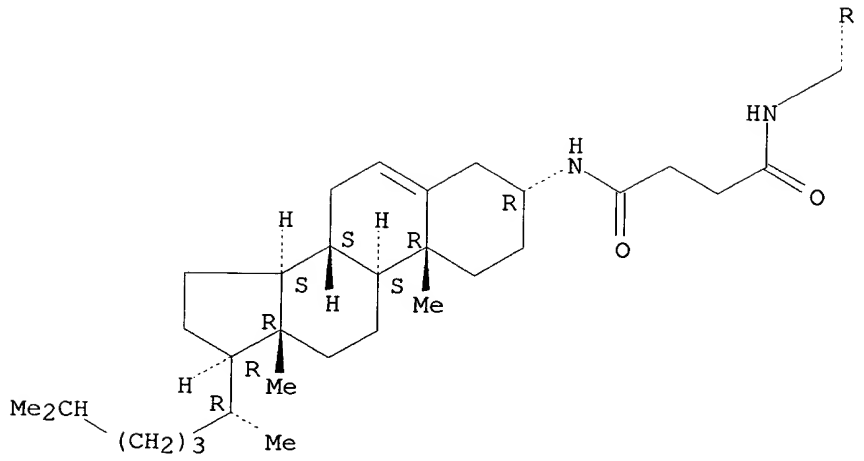
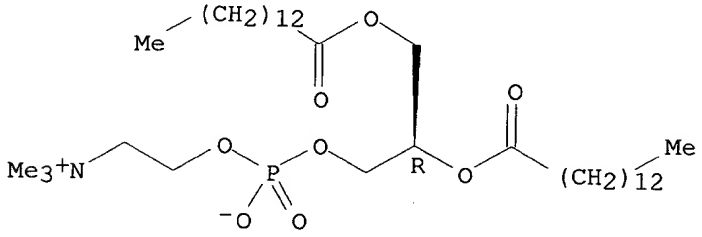




CM 2

CRN 18194-24-6
CMF C36 H72 N O8 P

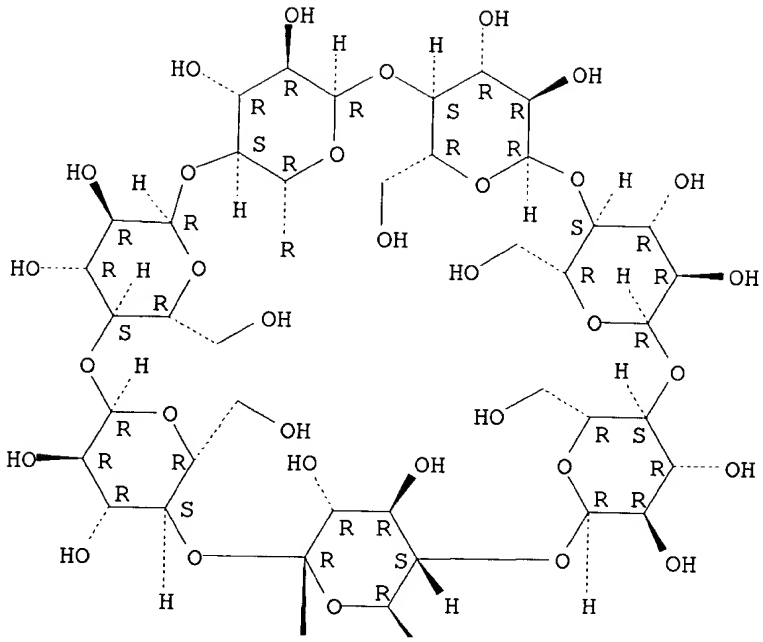
Absolute stereochemistry.



IT **250256-27-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(cholesterylcyclodextrins synthesis and insertion into phospholipid membranes)
RN 250256-27-0 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[(3α)-cholest-5-en-3-ylamino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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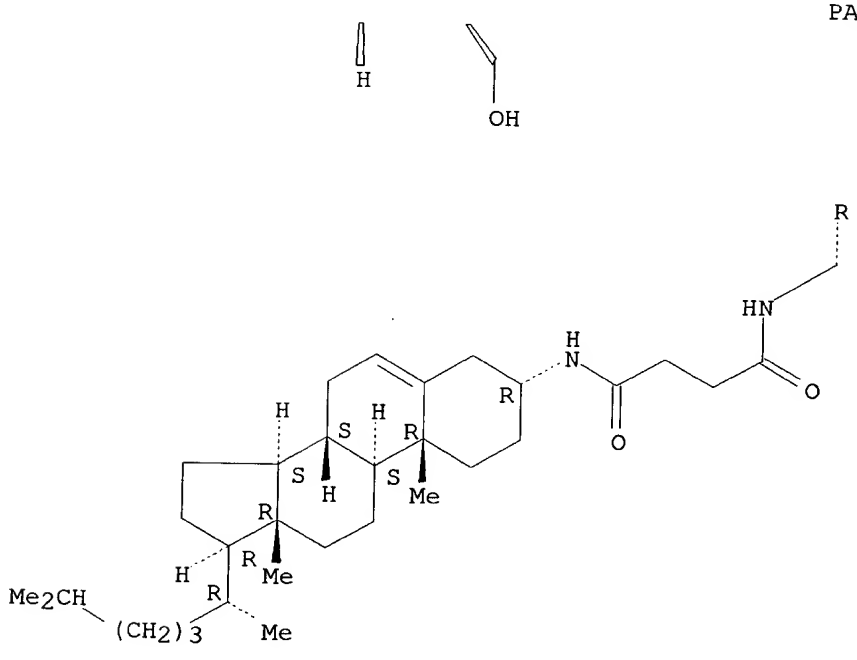


REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:453456 CAPLUS
DOCUMENT NUMBER: 132:9255
TITLE: In vitro and in vivo studies on the binding capacity of substance P-derived bifunctional ligands dedicated to drug targeting
AUTHOR(S): Wijkhuisen, A.; Pean, C.; Djedaini-Pilard, F.; Fischer, J.; Conrath, M.; Shigemoto, R.; Grassi, J.; Perly, B.; Couraud, J. Y.; Creminon, C.
CORPORATE SOURCE: CEA, DRM/SPI, Saclay, Gif sur Yvette, 91191, Fr.
SOURCE: NATO Science Series, Series A: Life Sciences (1999), 307(Peptidergic G Protein-Coupled Receptors), 157-160
CODEN: NASAF2; ISSN: 1387-6686
PUBLISHER: IOS Press
DOCUMENT TYPE: Journal
LANGUAGE: English

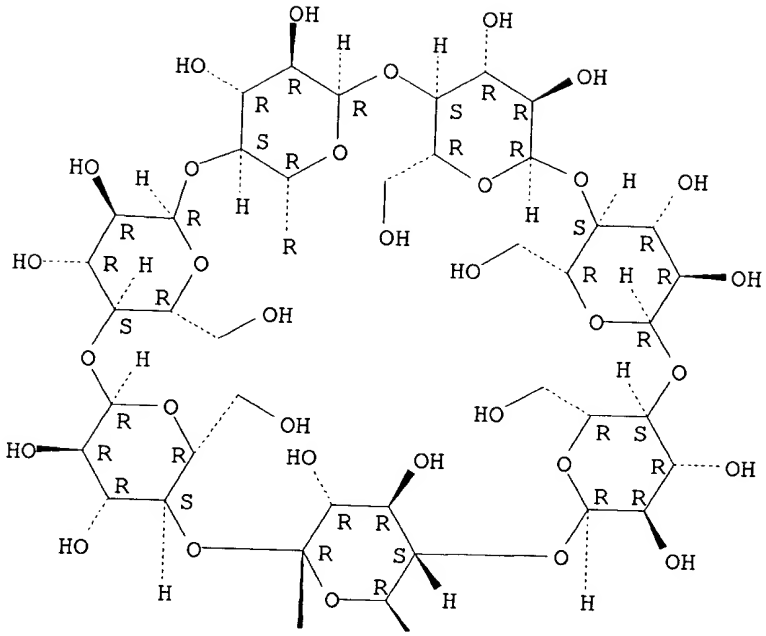
AB To validate the general concept of drug-targeting (i.e directing a drug towards a specific. biol. relevant site), the authors prepared new compds. by covalently grafting β or γ **cyclodextrin** (β-CD and γ-CD, oligosaccharide mols. capable of including a drug into their cavities) to the N-terminal part of the neuropeptide substance P (SP) acting as a mol. antenna. Biochem. expts., performed on CHO cells expressing the human NK1 receptor for SP, showed that CD-SP compds. were able to bind recombinant receptors with an affinity only slightly decreased compared to that of free SP. Moreover, peptido-**cyclodextrins** exerted agonist action on the recombinant receptors, as revealed by their ability to trigger a production of intracellular messengers in intact CHO cells. Finally, in vivo intracerebral injections of γ-CD-SP in the striatum of rats were shown to induce a massive internalization of the NK1 receptors, clearly revealed by confocal microscopy. Taken together, these results indicate that grafted SP specifically and efficiently targets γ-CD toward NK1 receptor-bearing cells both in vitro and in vivo.

IT **251374-54-6 251374-55-7 251374-56-8**
251374-57-9 251374-58-0 251374-59-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(substance P-cyclodextran grafts for drug targeting toward NK1 receptor-bearing cells)

RN 251374-54-6 CAPLUS
CN L-Methioninamide, 1-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-prolyl-L-glutaminyl-L-glutaminyl-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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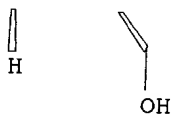

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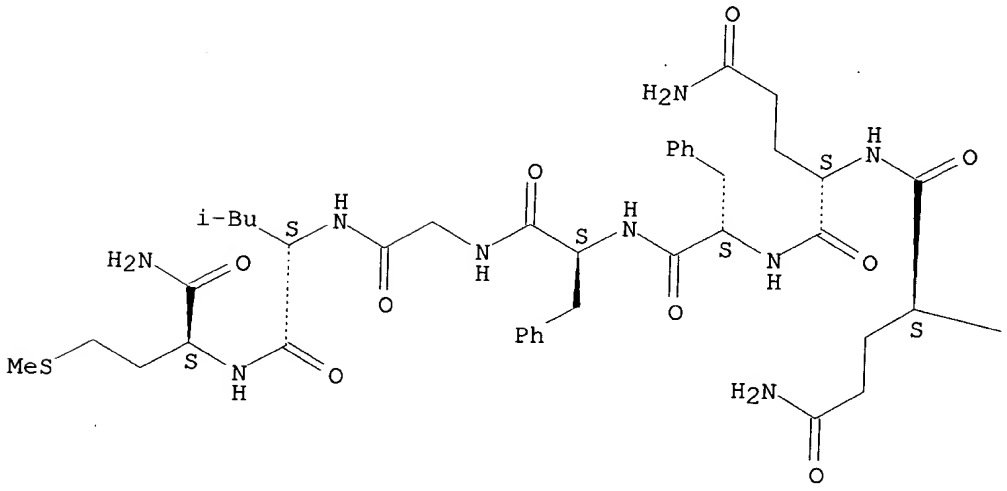

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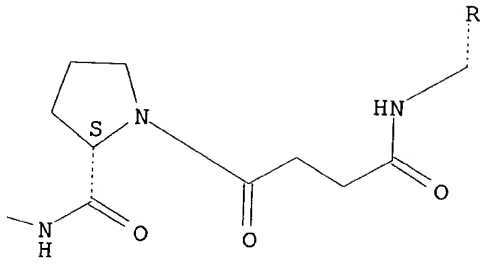
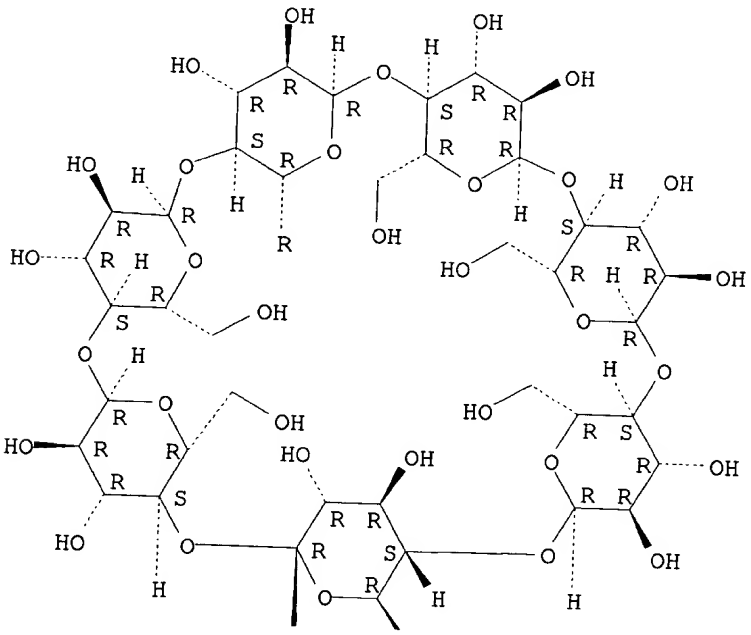


RN 251374-55-7 CAPLUS
CN L-Methioninamide, N2-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-arginyl-L-prolyl-L-lysyl-L-prolyl-L-glutaminyl-L-glutaminyl-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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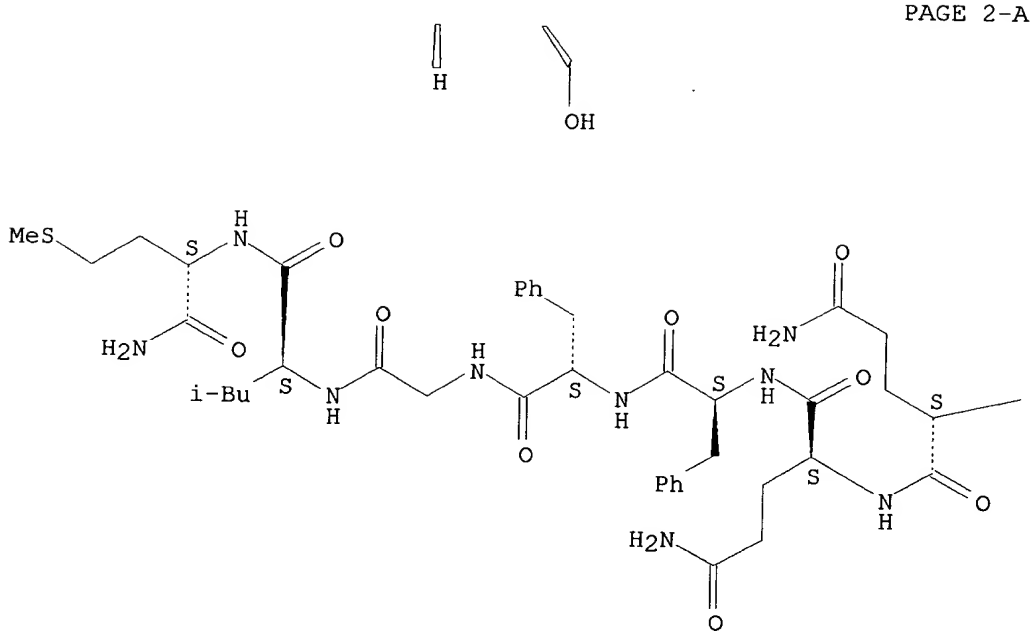

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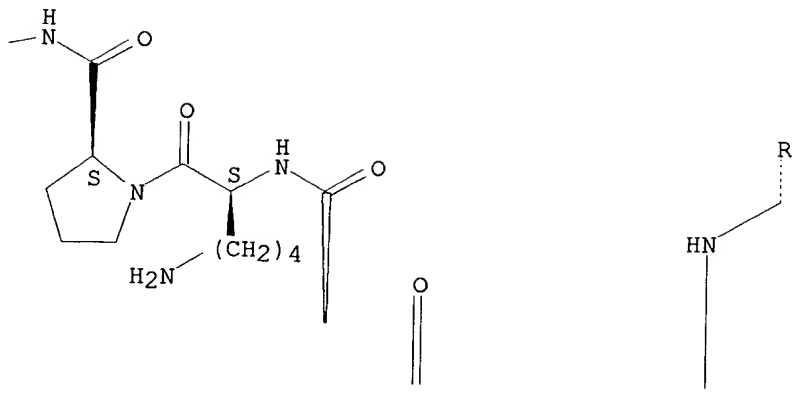
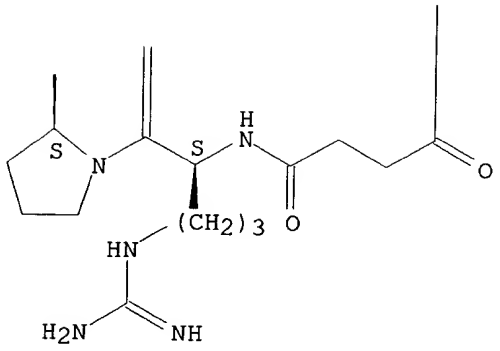


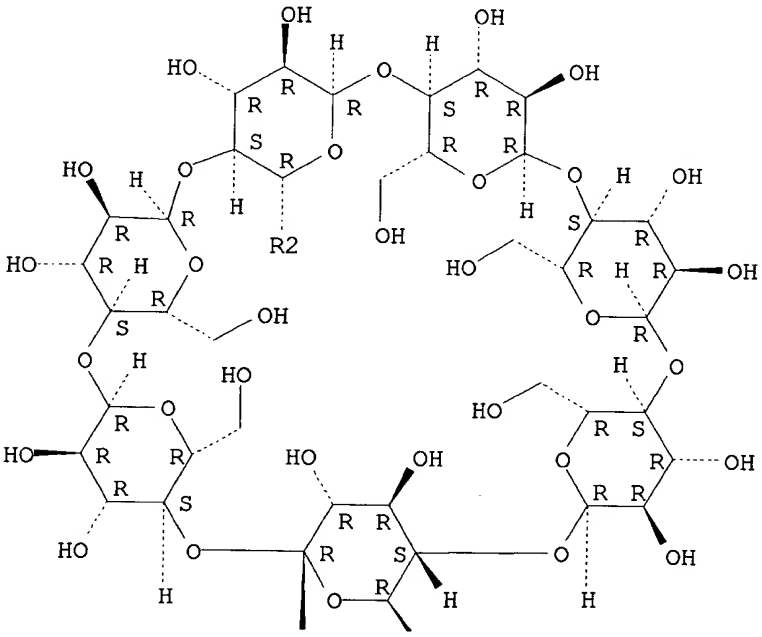


PAGE 3-B

RN 251374-56-8 CAPLUS
CN L-Methioninamide, L-arginyl-L-prolyl-N6-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-lysyl-L-prolyl-L-glutaminyl-L-glutaminyl-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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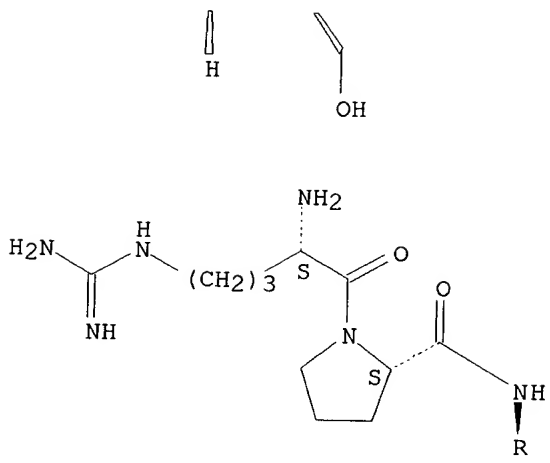

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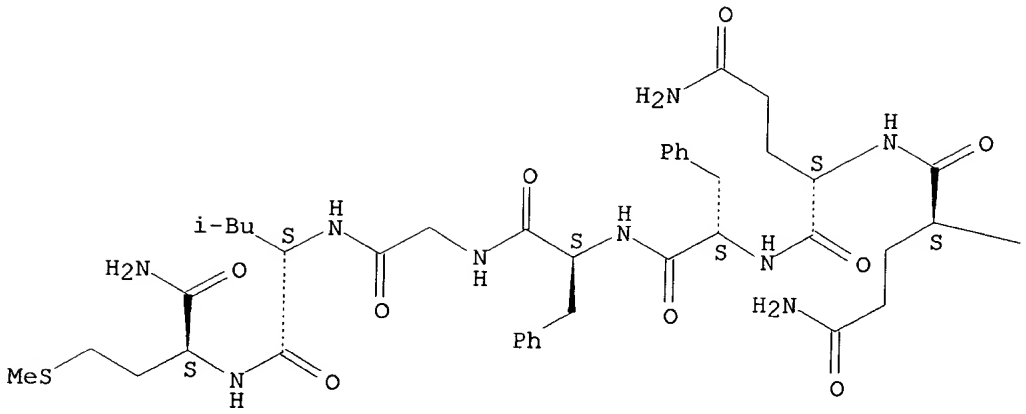

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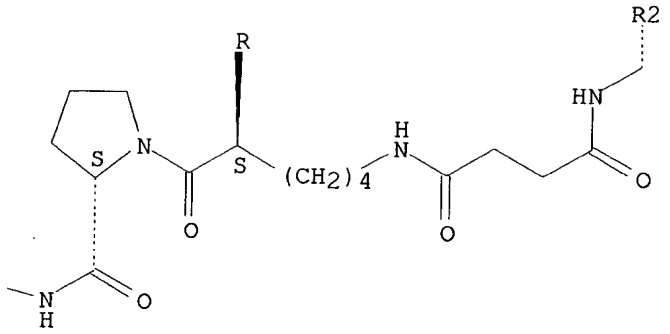
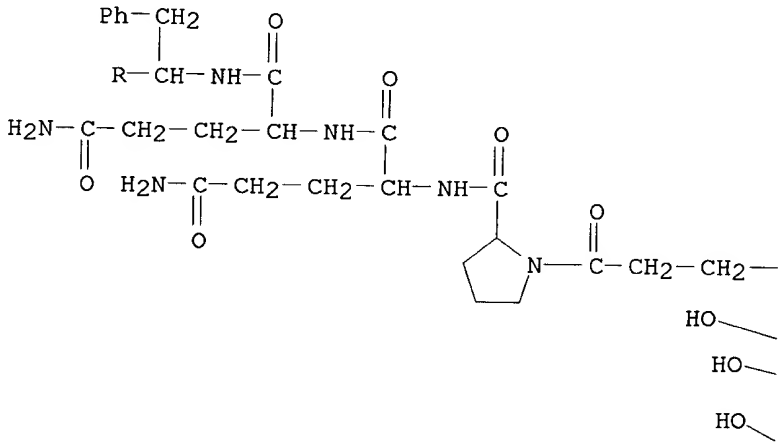


RN 251374-57-9 CAPLUS
CN L-Methioninamide, 1-[4-[(6A-deoxy-γ-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-prolyl-L-glutaminyl-L-glutaminyl-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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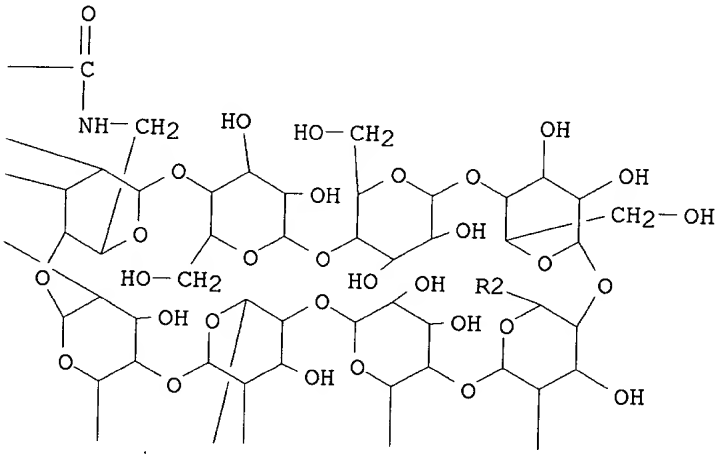

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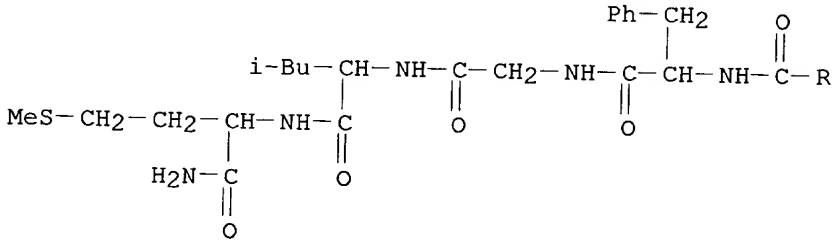

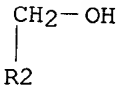

PAGE 2-B

RN 251374-58-0 CAPLUS
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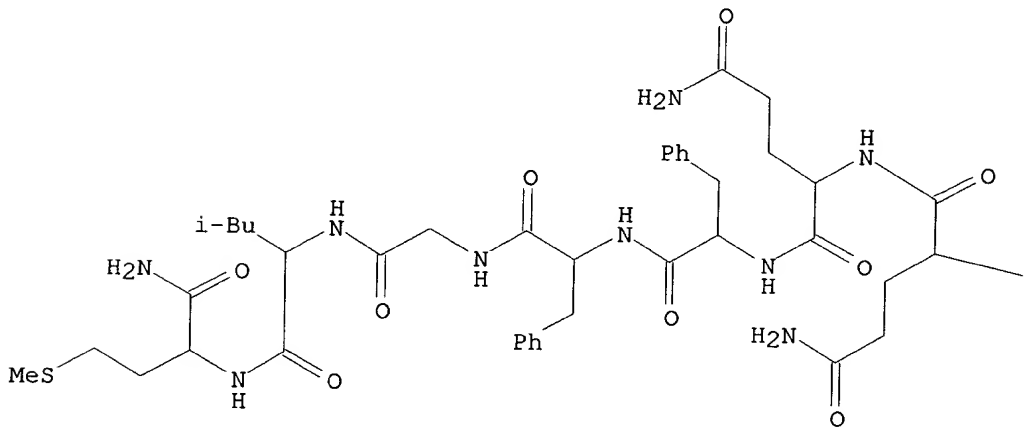
PAGE 1-A



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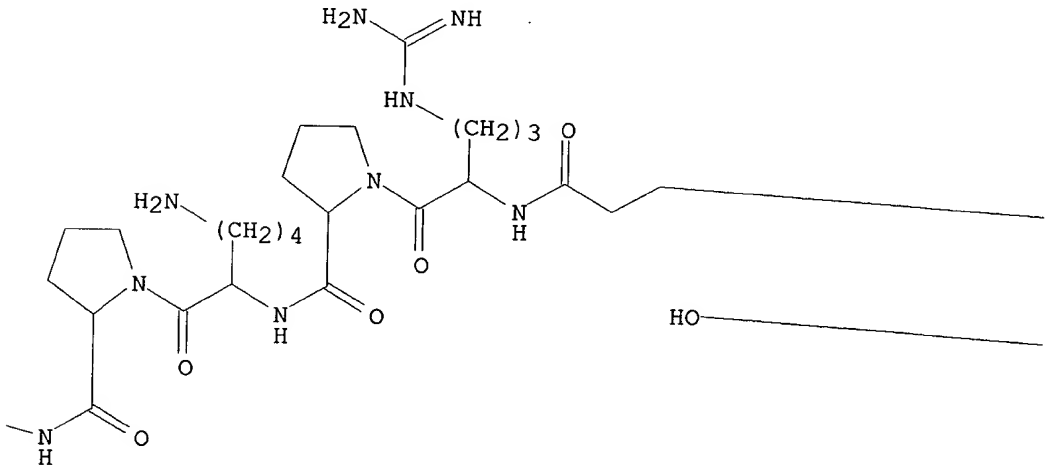

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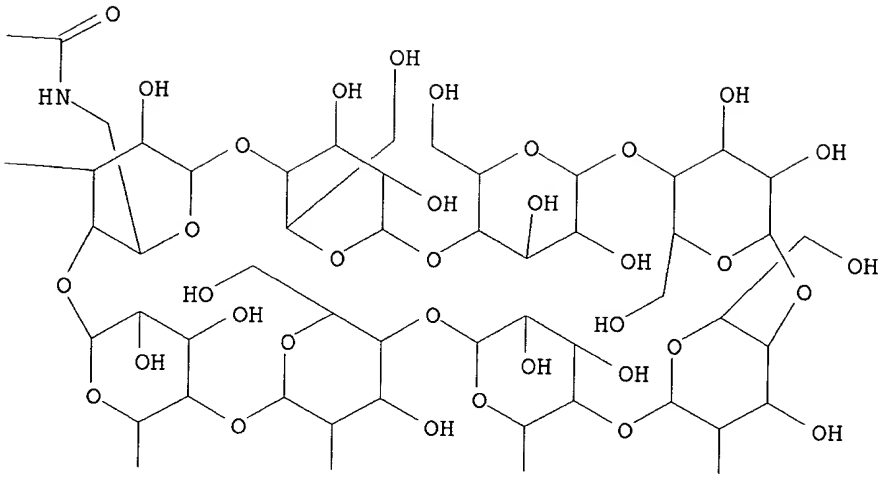

PAGE 2-C

RN 251374-59-1 CAPLUS
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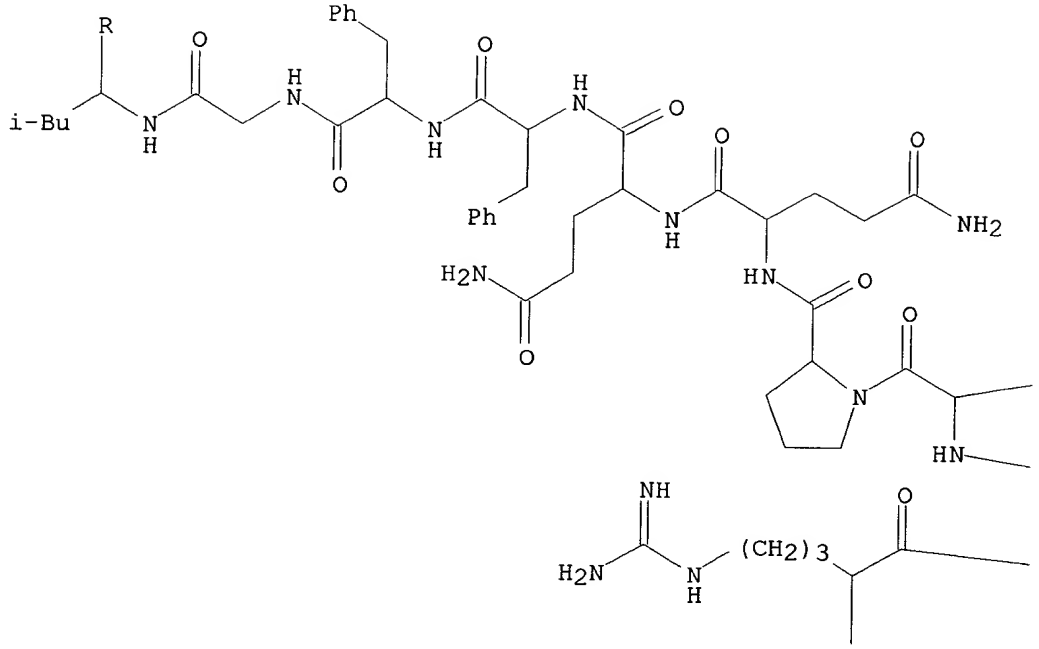
PAGE 1-A



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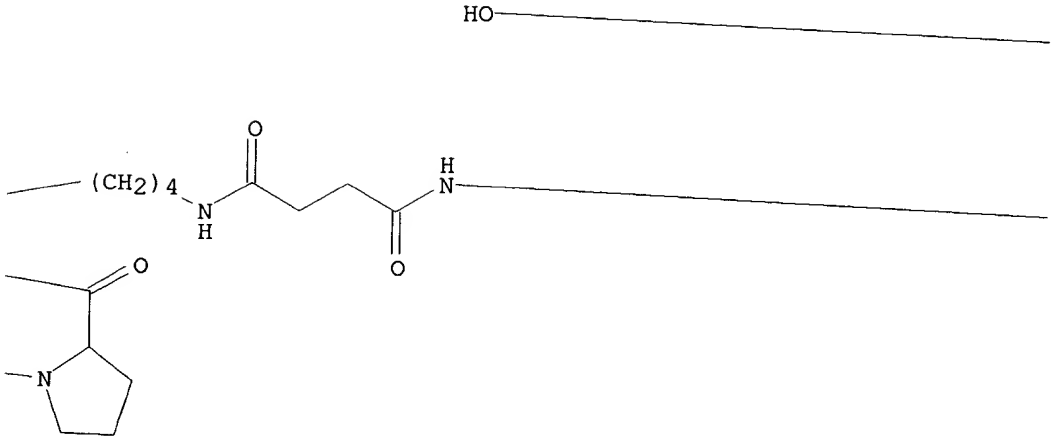

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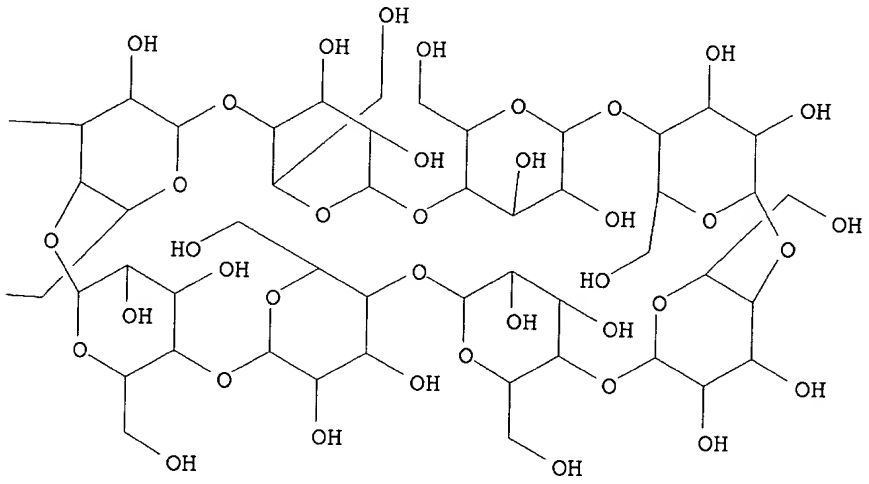

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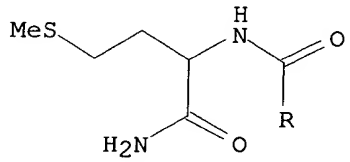


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 10 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:396543 CAPLUS
DOCUMENT NUMBER: 131:214547
TITLE: **Cyclodextrin** as carrier of bioactive peptides
AUTHOR(S): Schaschke, Norbert; Fiori, Stella; Fourmy, Daniel; Moroder, Luis
CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinsried, 82152, Germany
SOURCE: Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 315-316. Editor(s): Tam, James P.; Kaumaya, Pravin T. P. Kluwer: Dordrecht, Neth.
CODEN: 67UCAR
DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium report. Tetra- and heptagastrin peptide/β-**cyclodextrin** conjugates were prepared and their binding affinities to the CCK-β/gastrin receptor were determined

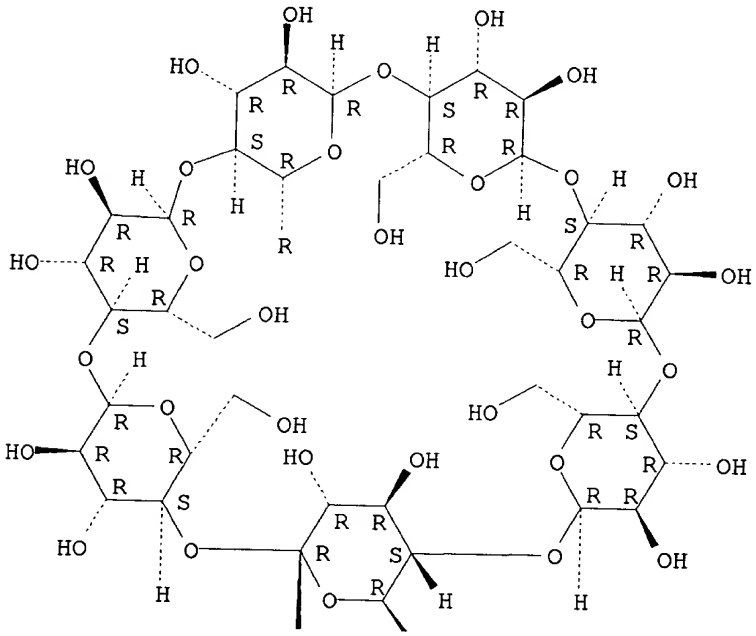
IT **211360-86-0P 211360-87-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and **cyclodextrin**-supported bioactive peptides)

RN 211360-86-0 CAPLUS

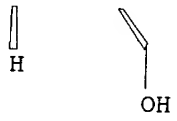
CN L-Phenylalaninamide, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

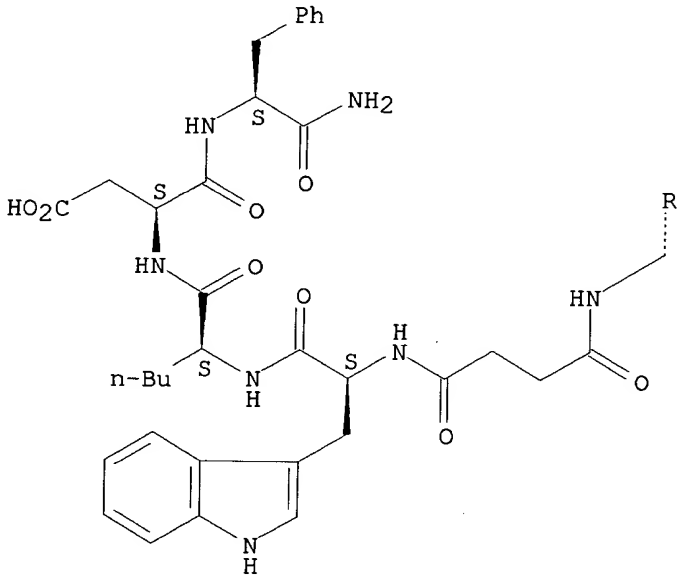
PAGE 1-A



PAGE 2-A



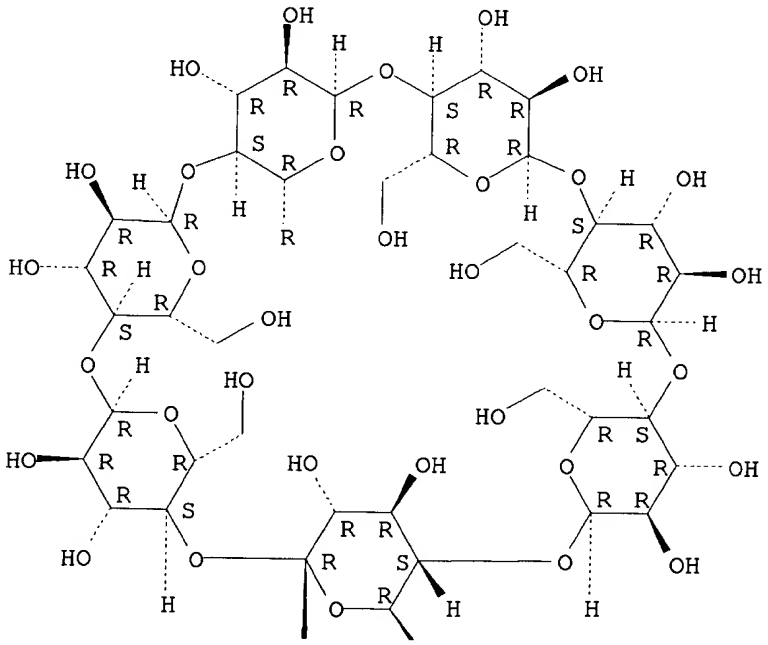
PAGE 3-A



RN 211360-87-1 CAPLUS
CN L-Phenylalaninamide, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylglycyl-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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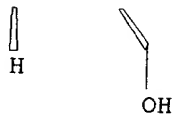
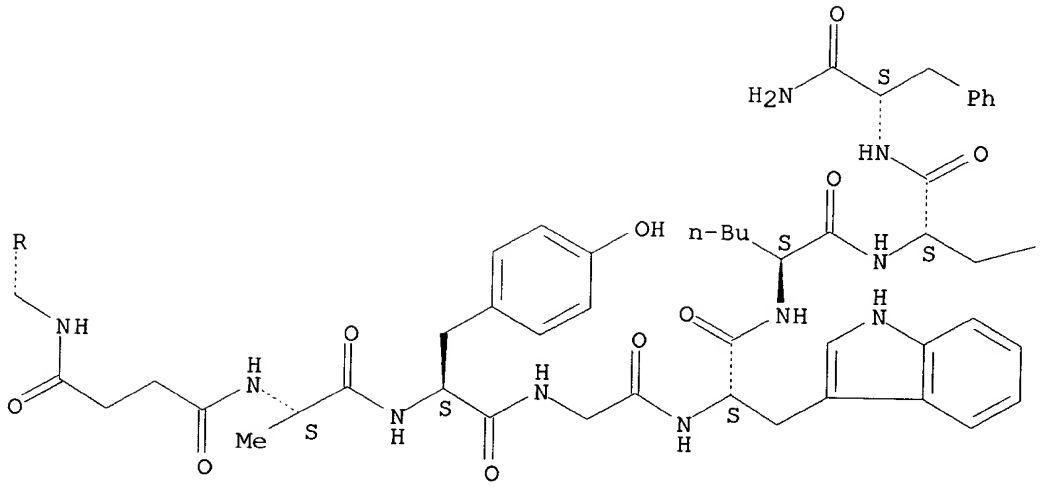


PAGE 3-A



PAGE 3-B

—CO_2H

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:738359 CAPLUS
DOCUMENT NUMBER: 130:154980
TITLE: N,N'-Bis(6A-deoxy-β- **cyclodextrin** -6A-yl)urea as a molecular template in the formation of indigoid dyes
AUTHOR(S): Easton, Christopher J.; Harper, Jason B.; Lincoln, Stephen F.

CORPORATE SOURCE: Research School of Chemistry, Australian National University, Canberra, 0200, Australia
SOURCE: New Journal of Chemistry (1998), 22(11), 1163-1165
CODEN: NJCHE5; ISSN: 1144-0546
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The title **cyclodextrin** dimer biases competing reactions of the indoxyl anion to give indirubin and indigo against the latter, due to the preferred geometry of alignment of the **cyclodextrin** annuli. The **cyclodextrin** acts to limit the formation of indigo rather than promote the production of indirubin.

IT **130912-23-1**
RL: NUU (Other use, unclassified); USES (Uses)
(template effect on formation of indigoid dyes from indoxyl anion)

RN 130912-23-1 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 12 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:614302 CAPLUS
DOCUMENT NUMBER: 129:289274
TITLE: **Cyclodextrins** having natural sugar chains as side chains, their manufacture with endoglycosidase, and their intermediates
INVENTOR(S): Inazu, Toshiyuki; Yamanoi, Takashi; Mizuno, Masamori; Matsuda, Keisuke; Haneda, Katsuji
PATENT ASSIGNEE(S): Noguchi Research Institute, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10251304	A2	19980922	JP 1997-76442	19970311

PRIORITY APPLN. INFO.: JP 1997-76442 19970311

AB **Cyclodextrins**, whose primary OH is substituted with NH2 and acylated by asparagine-bound glycoproteins having high-mannose or complex sugar chains, are manufactured by transglycosylation of monosaccharide-containing **cyclodextrins**, obtained by condensation of monosaccharide-containing carboxylic acids with aminocyclodextrins, in the presence of endoglycosidase. The product **cyclodextrins** are useful for drug delivery systems. Also claimed are intermediate aminocyclodextrins acylated by monosaccharide-containing carboxylic acids. (NeuAc-Gal-GlcNAc)2-(Man)3-(GlcNAc)2-Asn (NeuAc = N-acetylneuraminic acid residue; Gal = D-galactose residue; GlcNAc = N-acetyl-D-glucosamine residue; Man = D-mannose residue) was transglycosylated with Fmoc-Asn(GlcNAc)-NH-βCD (βCD = β- **cyclodextrin** residue) using endo-β-N-acetylglucosaminidase of Mucor hiemalis at 37° for 6

h to give 12.4% Fmoc-Asn[(NeuAc-Gal-GlcNAc)2-(Man)3-(GlcNAc)2]-NH-βCD.

IT **197509-29-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

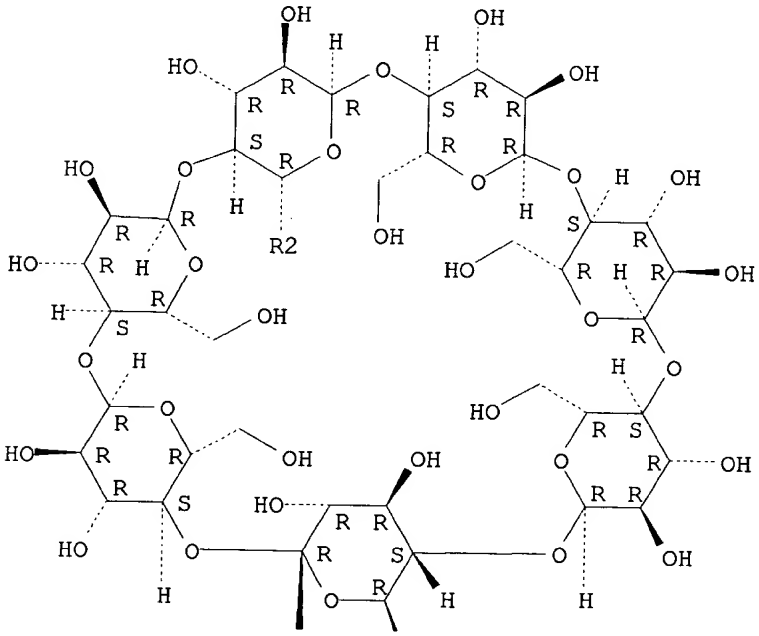
(enzymic manufacture of **cyclodextrins** having asparagine-bound sugar chains for drug delivery systems)

RN 197509-29-8 CAPLUS

CN β-Cyclodextrin, 6A-[[(2S)-4-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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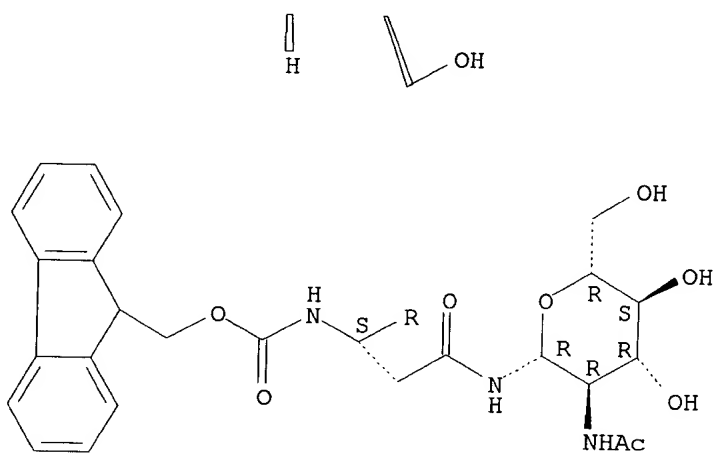

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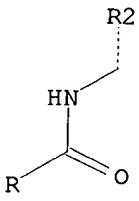
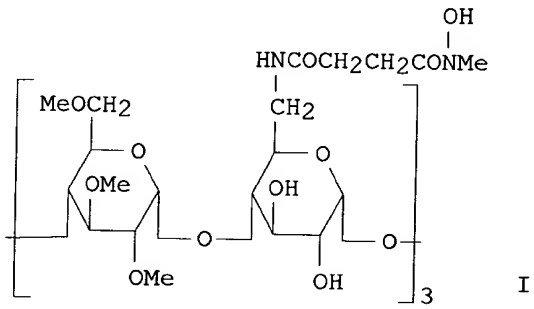


L14 ANSWER 13 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:600670 CAPLUS
DOCUMENT NUMBER: 129:302779
TITLE: Effects of solvents on the chirality of ferrichrome-mimicking Fe3+ complexes based on α-**cyclodextrin**
AUTHOR(S): Hori, Yuji; Tamagaki, Seizo
CORPORATE SOURCE: Dep. of Bioapplied Chemistry, Faculty of Engineering, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Nippon Kagaku Kaishi (1998), (9), 602-608
CODEN: NKAKB8; ISSN: 0369-4577
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI



I

AB An α- **cyclodextrin**-based three-fold sym. tripodal ferrichrome mimic containing three MeN(OH)COCH2CH2CONH side chains [I; R = NHCOCH2CH2CON(OH)Me] was designed and synthesized. The chirality of its complex with Fe3+ ion was examined in various solvents such as water, methanol, and acetonitrile by using CD spectroscopy. The chirality varied remarkably with changing solvents. A mechanism involving hydrogen-bonding with solvent, which dets. the chirality, was proposed.

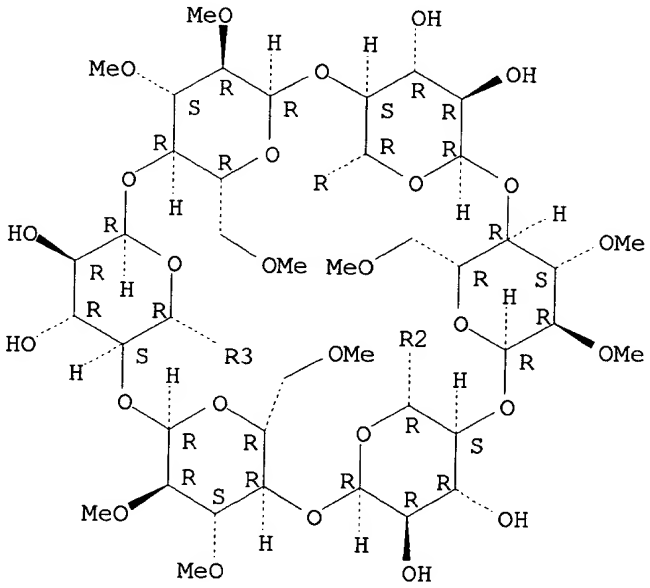
IT **214556-55-5DP**, complex with chromium(III) ion **214556-55-5P**
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(effects of solvents on chirality of ferrichrome-mimicking Fe3+ complexes based on α- **cyclodextrin**)

RN 214556-55-5 CAPLUS

CN α-Cyclodextrin, 6B,6D,6F-trideoxy-6B,6D,6F-tris[[4-(hydroxymethylamino)-1,4-dioxobutyl]amino]-2A,2C,2E,3A,3C,3E,6A,6C,6E-nona-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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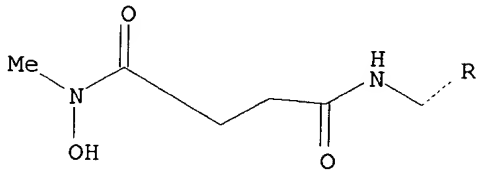

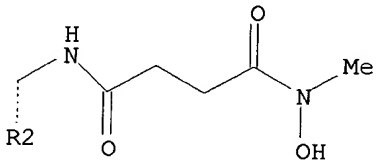

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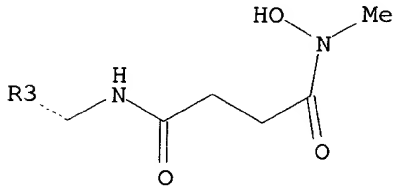
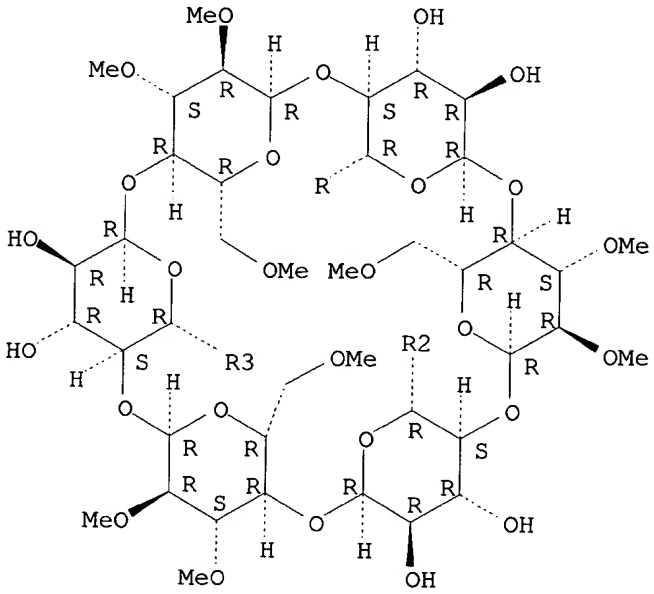


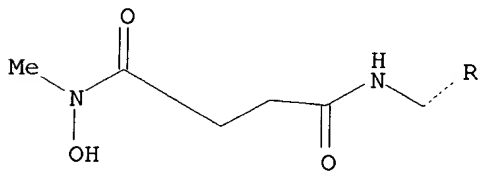
RN 214556-55-5 CAPLUS
CN α-Cyclodextrin, 6B,6D,6F-trideoxy-6B,6D,6F-tris[[4-(hydroxymethylamino)-1,4-dioxobutyl]amino]-2A,2C,2E,3A,3C,3E,6A,6C,6E-nona-O-methyl- (9CI) (CA INDEX NAME)

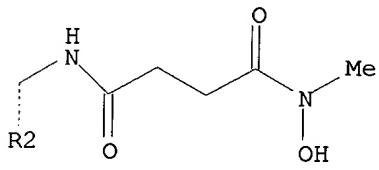
Absolute stereochemistry.

PAGE 1-A

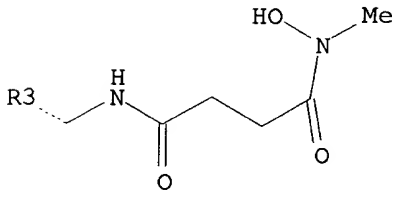


PAGE 2-A





PAGE 3-A



IT **214556-59-9P**

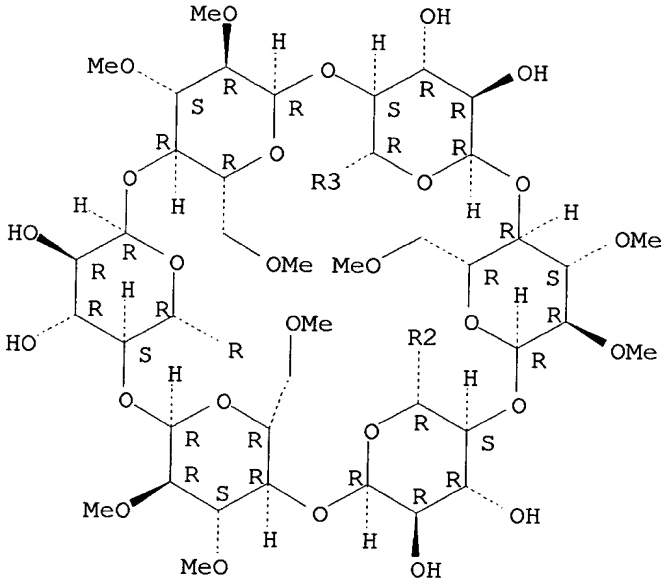
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(effects of solvents on chirality of ferrichrome-mimicking Fe3+ complexes based on α- **cyclodextrin**)

RN 214556-59-9 CAPLUS

CN α-Cyclodextrin, 6B,6D,6F-trideoxy-2A,2C,2E,3A,3C,3E,6A,6C,6E-nona-O-methyl-6B,6D,6F-tris[[4-[methyl(phenylmethoxy)amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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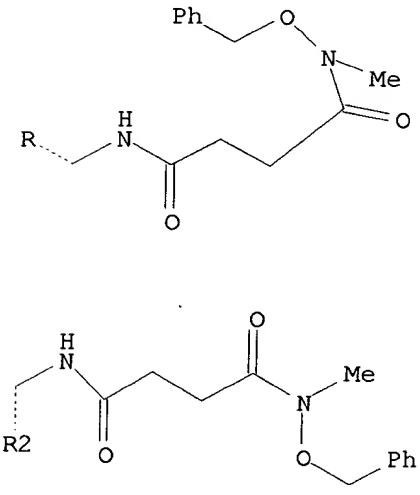
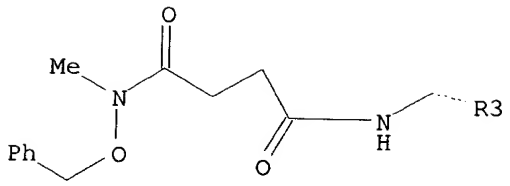


PAGE 3-A



L14 ANSWER 14 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:454164 CAPLUS
DOCUMENT NUMBER: 129:203163
TITLE: Synthesis and enhanced chemiluminescence of new cyclomaltooligosaccharide (**cyclodextrin**) -bound 6-phenylimidazo[1,2-a]pyrazin-3(7H) -one
AUTHOR(S): Teranishi, Katsunori; Komoda, Atsuko; Hisamatsu, Makoto; Yamada, Tetsuya
CORPORATE SOURCE: Faculty of Bioresources, Mie University, Mie, 514, Japan
SOURCE: Carbohydrate Research (1998), 306(1-2), 177-187
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

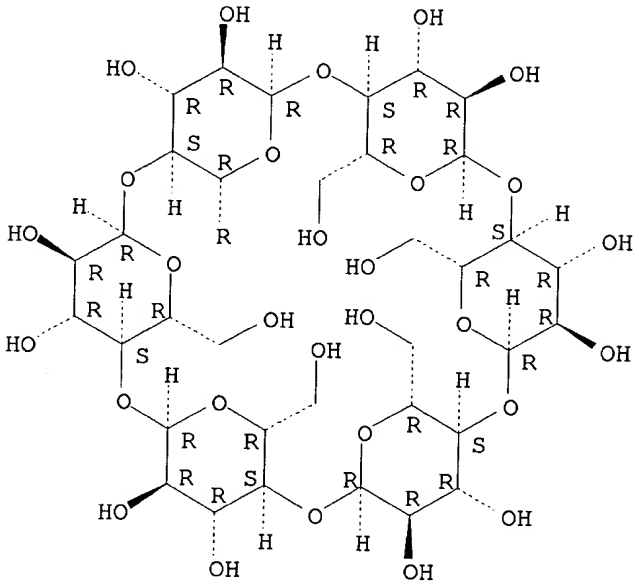
AB In order to provide chemiluminescent substrates that have high light-emitting efficiency in aqueous solution, the structural design on 6-phenylimidazo[1,2-a]pyrazin-3(7H)-one compds. was studied in the covalent attachment of a light-producing chromophore to a cyclomaltooligosaccharide (**cyclodextrin**). The synthesis of **cyclodextrin**-bound 6-phenylimidazo[1,2-a]pyrazin-3(7H)-one compds. was achieved by the formation of an amido bond between a 6-phenylimidazo[1,2-a]pyrazin-3(7H)-one and a mono-6-amino-6-deoxycyclodextrin. The properties of oxygen-induced chemiluminescence of the synthesized **cyclodextrin**-bound light-emitting chromophores were investigated. The light-emitting efficiency in pH 8.3 phosphate buffer was remarkably dependent on the kind of bound **cyclodextrin** and the binding site between the chromophore and **cyclodextrin**. The light-emitting efficiency of a **cyclodextrin**-bound compound in which cyclomaltoheptaose (β- **cyclodextrin**) had been covalently attached to the 2-position of the imidazo[1,2-a]pyrazin-3(7H)-one ring system showed an up to 11-fold enhancement over that of a non-**cyclodextrin** chromophore, whereas attachment to cyclomaltohexaose (α- **cyclodextrin**) resulted in no enhancement. Moreover, this study indicated that the strategy that involves covalently attaching a light-producing chromophore onto a **cyclodextrin** for the enhancement of chemiluminescence is more efficient than the use of an aqueous solution containing very large amts. of **cyclodextrin**.

IT **212253-66-2P 212253-67-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and enhanced chemiluminescence of cyclomaltooligosaccharide **cyclodextrin** bound 6-phenylimidazo[1,2-a]pyrazin-3-one)
RN 212253-66-2 CAPLUS

CN α-Cyclodextrin, 6A-deoxy-6A-[[4-[[5-(4-methoxyphenyl)pyrazinyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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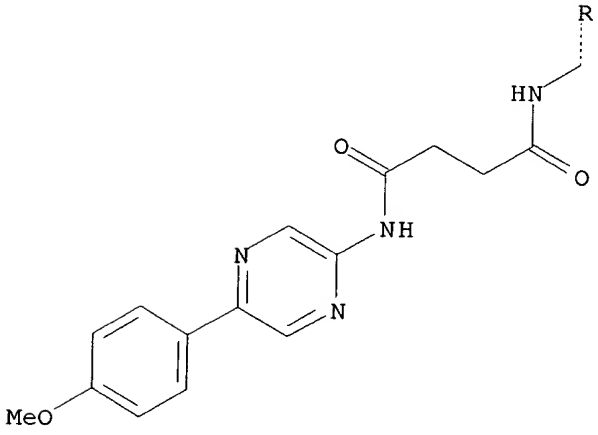
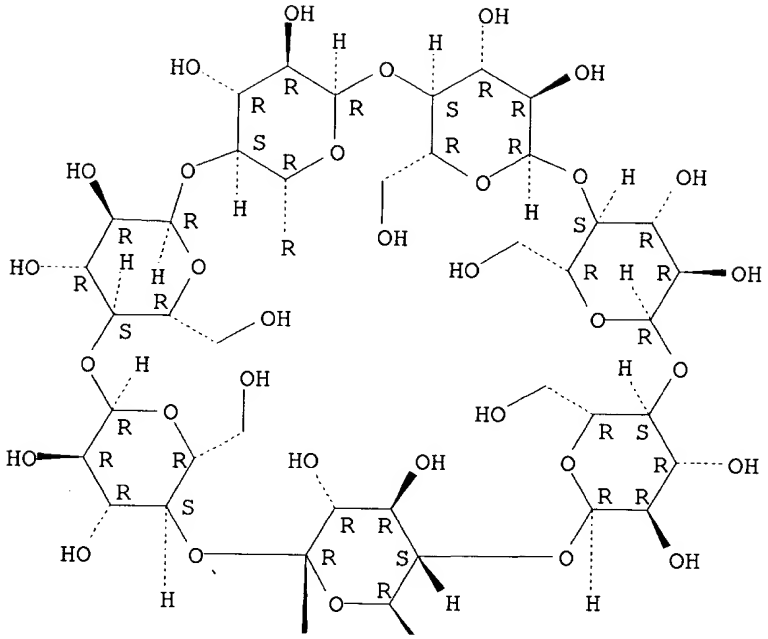


RN 212253-67-3 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[[5-(4-methoxyphenyl)pyrazinyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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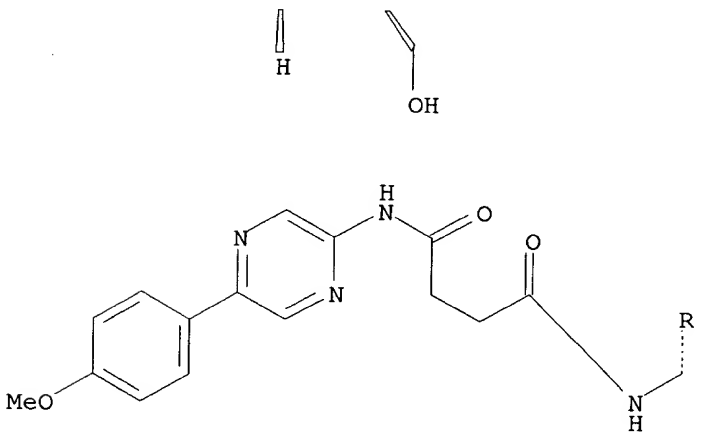


REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 15 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:431175 CAPLUS
DOCUMENT NUMBER: 129:180027
TITLE: **Cyclodextrin** as Carrier of Peptide Hormones. Conformational and Biological Properties of β-**Cyclodextrin**/Gastrin Constructs
AUTHOR(S): Schaschke, Norbert; Fiori, Stella; Weyher, Elisabeth;

Escrieut, Chantal; Fourmy, Daniel; Mueller, Gerhard; Moroder, Luis
CORPORATE SOURCE: Max-Planck-Institut fuer Biochemie, Martinsried, 82152, Germany
SOURCE: Journal of the American Chemical Society (1998), 120(28), 7030-7038
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The C-terminal tetrapeptide amide of gastrin, the shortest sequence of this gastrointestinal hormone capable of exhibiting all the biol. properties even though at reduced potency, and the related heptapeptide amide were covalently linked to mono-(6-succinylamino-6-deoxy)-β-**cyclodextrin** to analyze the effect of the bulky cyclic carbohydrate moiety on recognition of the peptides by the G-protein-coupled CCK-B/gastrin receptor and on their signal transduction potencies. With the four-carbon succinyl spacer and particularly with the addnl. tripeptide spacer in the heptapeptide/β- **cyclodextrin** conjugate, full recognition by the receptor was obtained with binding affinities identical to those of the unconjugated tetrapeptide and with a potency comparable to that of full agonists. Docking of this conjugate onto a structure of the human CCK-B receptor derived by homol. modeling indicates sufficient free space of the peptide moiety for intermol. interaction at the putative gastrin binding site, whereby addnl. interactions of the **cyclodextrin** with the receptor surface apparently suffice for stabilizing the complex and thus for triggering the full hormonal message. The host/guest complexation of the peptide moiety by the β- **cyclodextrin** which seems to occur at least in the case of the tetrapeptide conjugate does not suffice in its strength for competing with the receptor recognition. However, multiple presentation of the tetragastrin by its covalent linkage to the heptakis-(6-succinylamino-6-deoxy)-β- **cyclodextrin** leads to peptide/peptide and/or peptide/**cyclodextrin** collapses with strong interferences in the receptor recognition process. Retention of full agonism by suitably designed monoconjugates of bioactive peptides with **cyclodextrins** suggests a highly promising approach for targeting host/guest complexed or covalently bound cytotoxic drugs to specific tumor cells for receptor-mediated internalization.

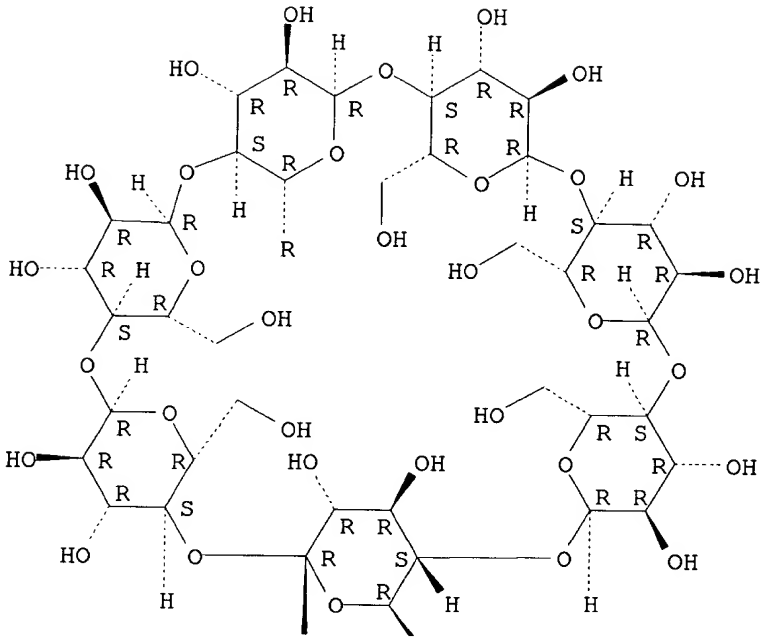
IT **211360-86-0P 211360-87-1P**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(conformational and biol. properties of β- **cyclodextrin** /gastrin constructs)

RN 211360-86-0 CAPLUS

CN L-Phenylalaninamide, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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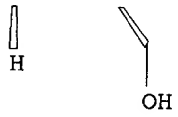

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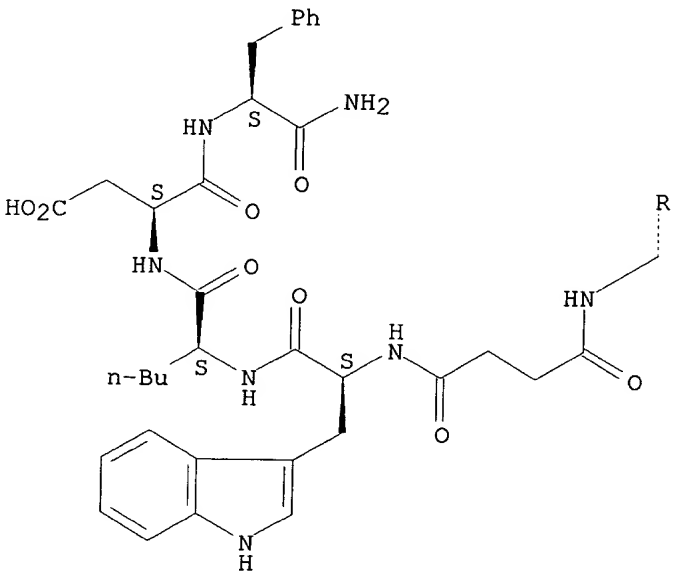
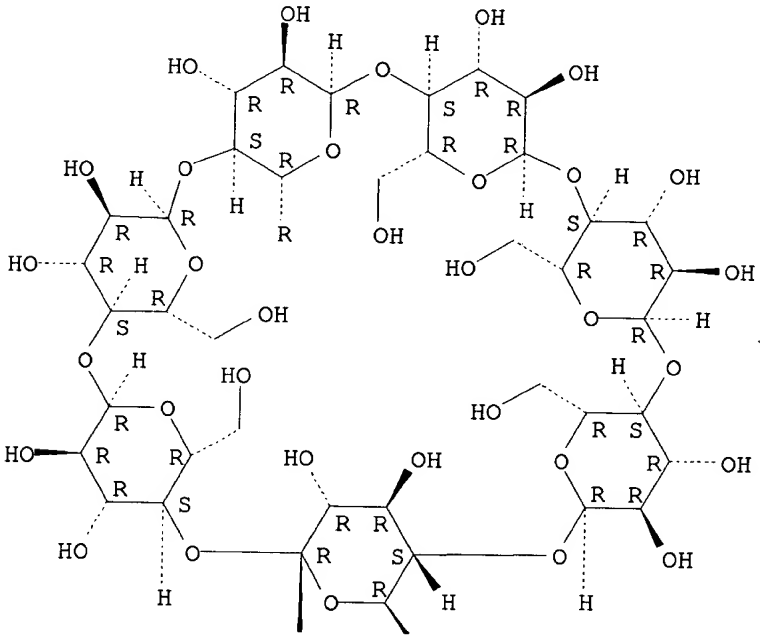


RN 211360-87-1 CAPLUS
CN L-Phenylalaninamide, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylglycyl-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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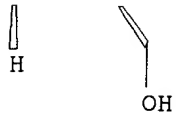

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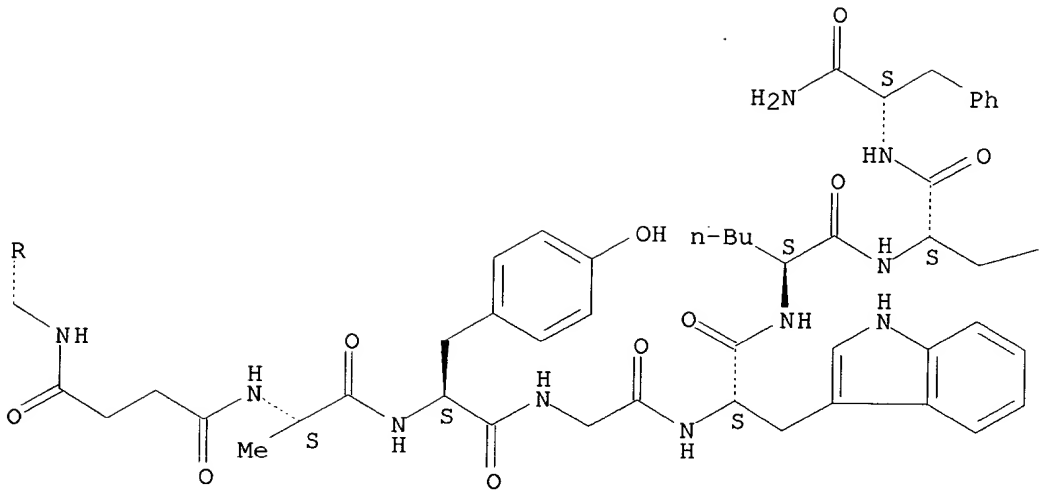

PAGE 3-B

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REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 16 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:706269 CAPLUS
DOCUMENT NUMBER: 127:346584
TITLE: Synthesis of **cyclodextrin** derivatives carrying bio-recognizable saccharide antennae
AUTHOR(S): Kassab, Rima; Felix, Caroline; Parrot-Lopez, Helene; Bonaly, Roger
CORPORATE SOURCE: Equipe Reconnaissance et Organisation Moleculaire et

Biomoleculaire, associee au CNRS Universite Claude Bernard-Lyon I, Villeurbanne, 69622, Fr.
SOURCE: Tetrahedron Letters (1997), 38(43), 7555-7558
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The use of coupling saccharide antenna onto **cyclodextrins** allows mobility for the biol. active galactose head group, and allows the recognition process by the lectin (KbCWL). Not. This paper reports a chem. synthesis of β-CD derivs. using spacer arms 3, 4, 5, 6 and 9 carbon atoms. Preliminary results suggested that recognition is strongly dependent on the length of the spacer chain between the **cyclodextrin** and the sugar head group.

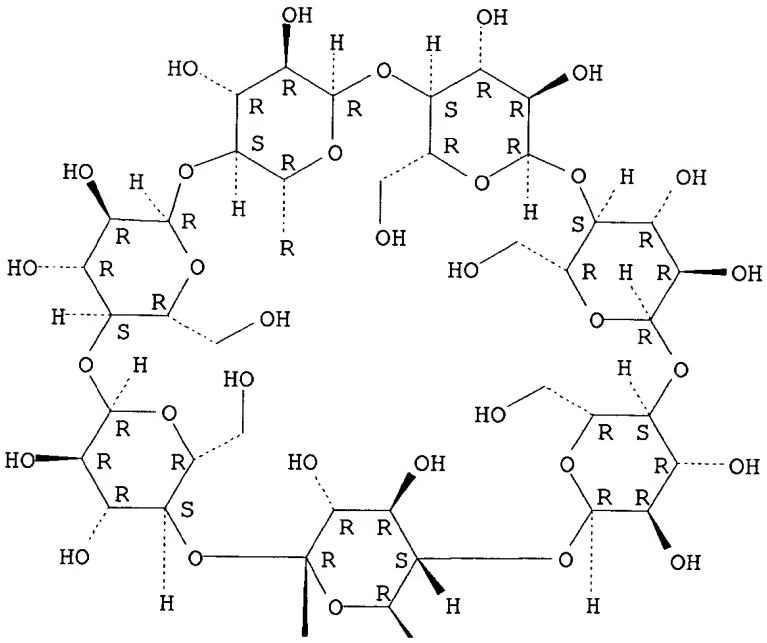
IT **198149-56-3P 198149-57-4P 198149-58-5P 198149-59-6P 198149-60-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of **cyclodextrin** derivs. carrying bio-recognizable saccharide antennae)

RN 198149-56-3 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[3-(β-D-galactopyranosylamino)-1,3-dioxopropyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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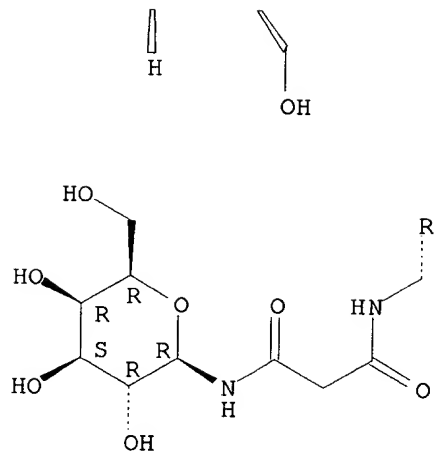
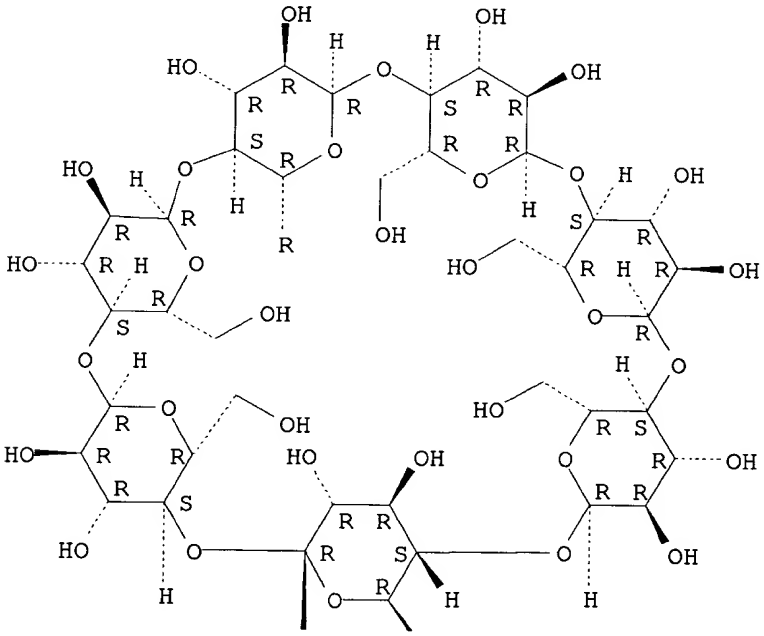


RN 198149-57-4 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[4-(β-D-galactopyranosylamino)-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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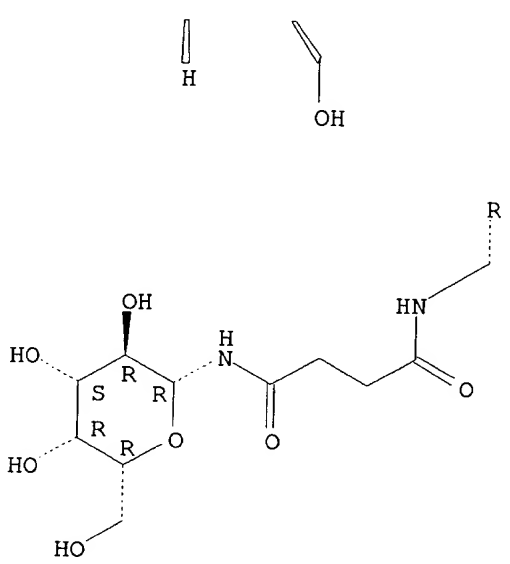
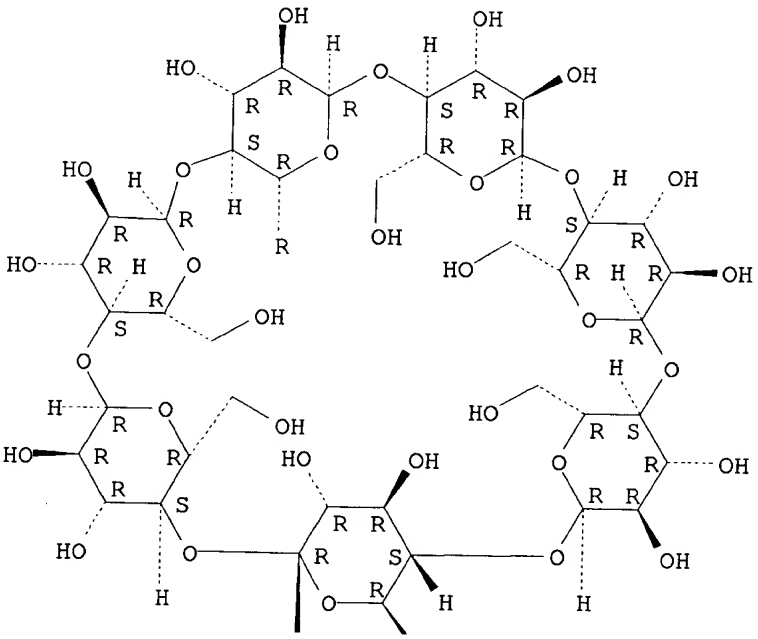


RN 198149-58-5 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[5-(β-D-galactopyranosylamino)-1,5-dioxopentyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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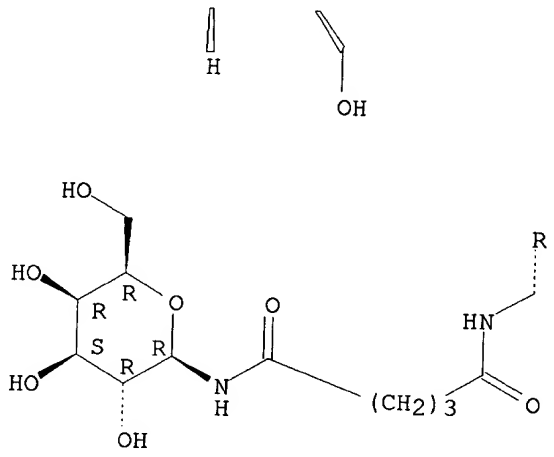
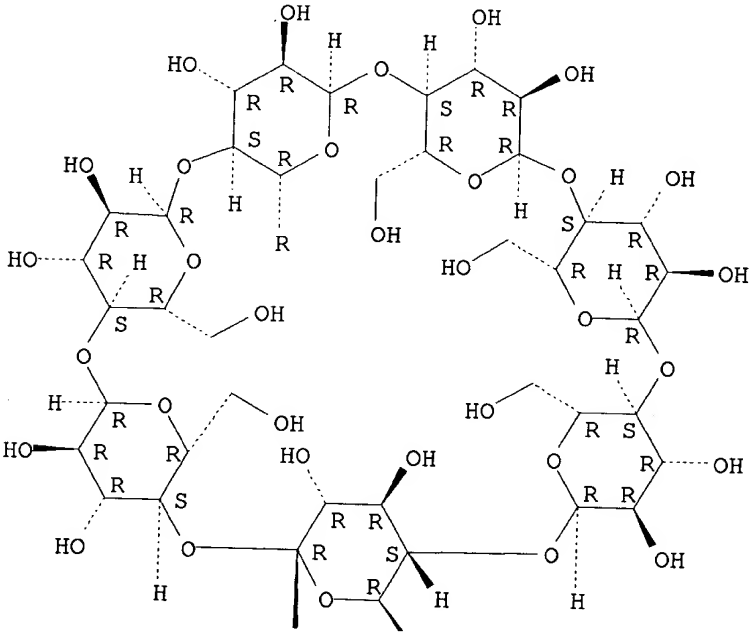


RN 198149-59-6 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[6-(β-D-galactopyranosylamino)-1,6-dioxohexyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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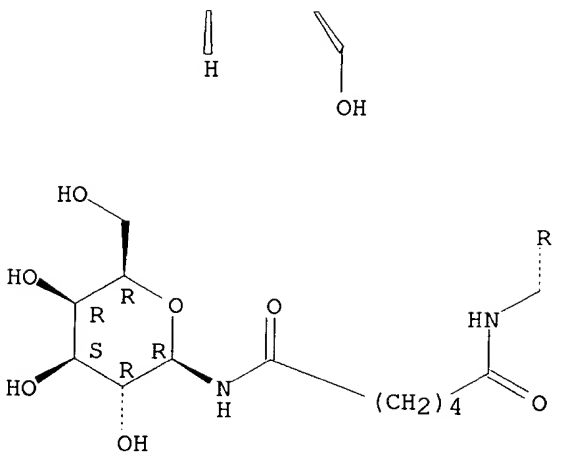
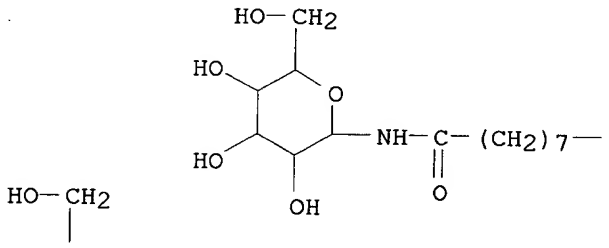


RN 198149-60-9 CAPLUS
CN β-Cyclodextrin, 6A,6B,6C,6D,6E,6F,6G-heptadeoxy-6A,6B,6C,6D,6E,6F,6G-heptakis[[9-(β-D-galactopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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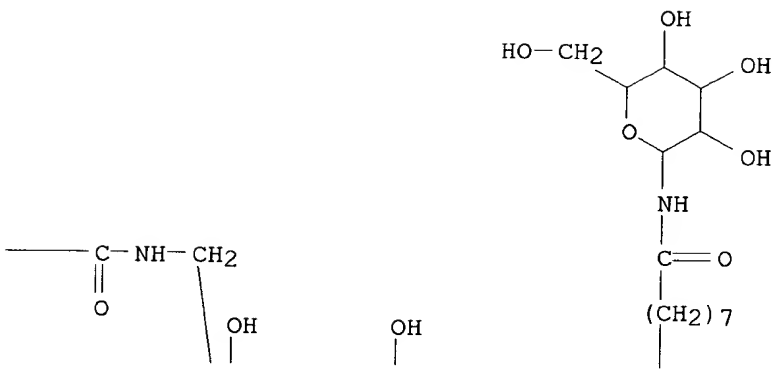

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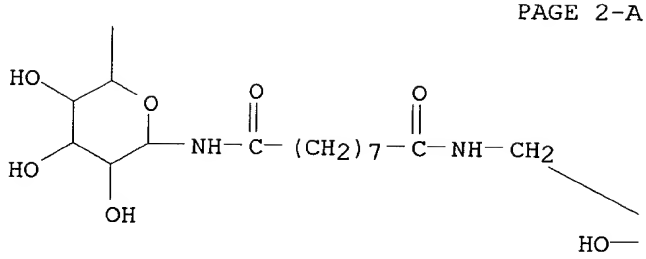

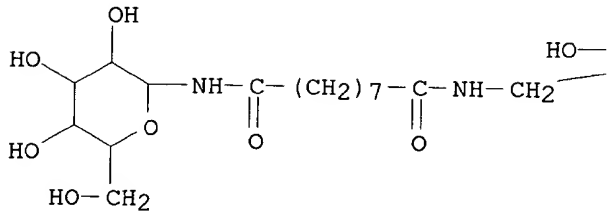

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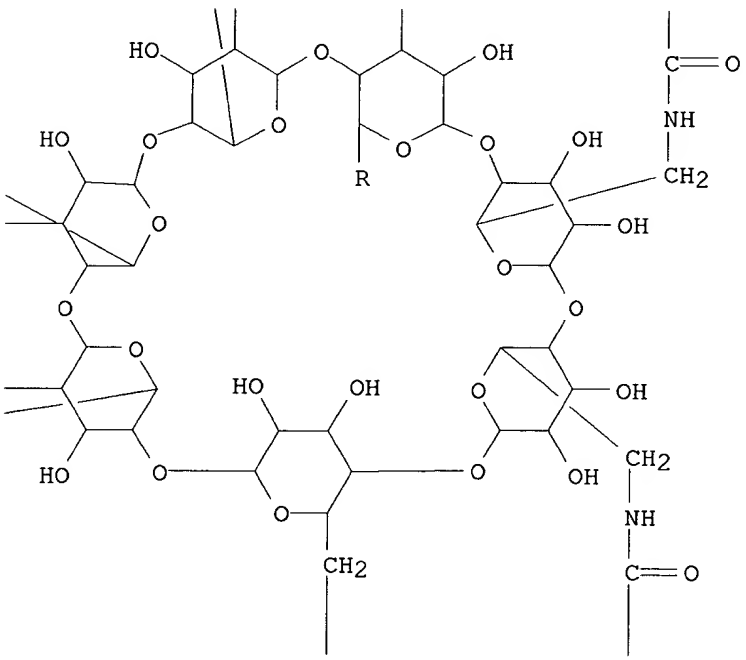

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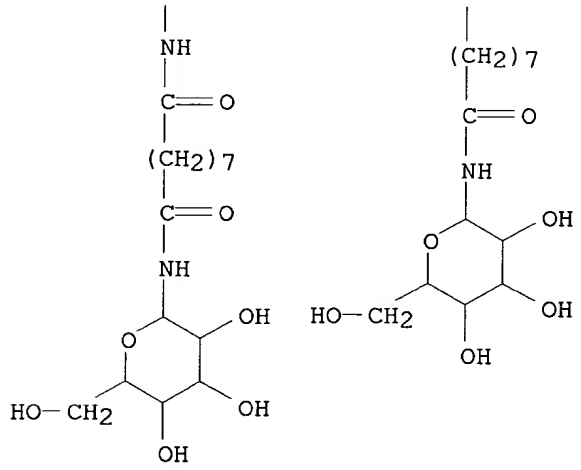

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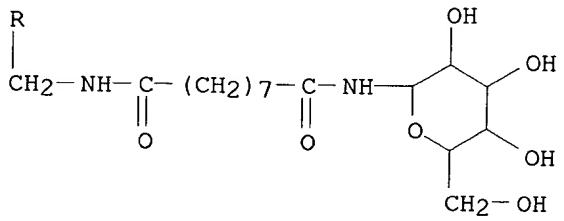


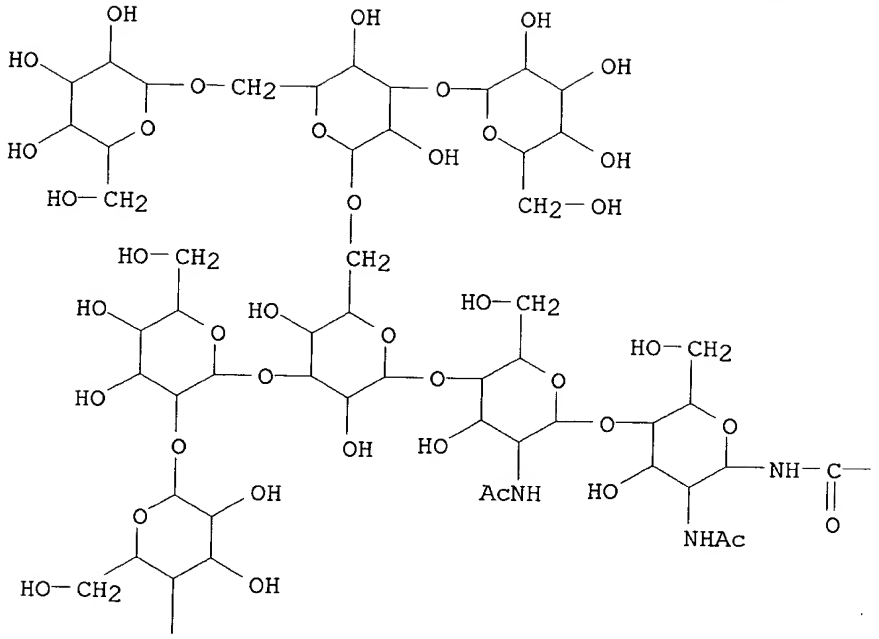
L14 ANSWER 17 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:686353 CAPLUS
DOCUMENT NUMBER: 127:319167
TITLE: The chemo-enzymic synthesis and evaluation of oligosaccharide-branched **cyclodextrins**
AUTHOR(S): Matsuda, Keisuke; Inazu, Toshiyuki; Haneda, Katsuji; Mizuno, Mamoru; Yamanoi, Takashi; Hattori, Kenjiro; Yamamoto, Kenji; Kumagai, Hidehiko
CORPORATE SOURCE: Tokyo Institute of Polytechnics, Faculty of Engineering, Atsugi, 243-02, Japan
SOURCE: Bioorganic & Medicinal Chemistry Letters (1997), 7(18), 2353-2356
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The syntheses of oligosaccharide-branched **cyclodextrins**, which showed potential binding to the saccharide-interacting protein, lectin, were investigated. The trans-glycosidations to Fmoc- Asn(GlcNAc)-NH-**cyclodextrin** by endo-β-N-acetylglucosaminidase of Mucor hiemalis (Endo-M) gave three kinds of natural oligosaccharide-branched **cyclodextrins** in satisfactory yields. The association constant of the high-mannose type oligosaccharide-branched CD with immobilized Con A was found to be approx. 1.6 + 107 M-1 using an optical biosensor.

IT **197509-30-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(chemo-enzymic preparation oligosaccharide-branched **cyclodextrins** and their binding to proteins and lectins)

RN 197509-30-1 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[(2S)-4-[[O-α-D-mannopyranosyl-(1→3)-O-[α-D-mannopyranosyl-(1→6)]-O-α-D-mannopyranosyl-(1→6)-O-[O-α-D-mannopyranosyl-(1→2)-α-D-mannopyranosyl-(1→3)]-O-β-D-mannopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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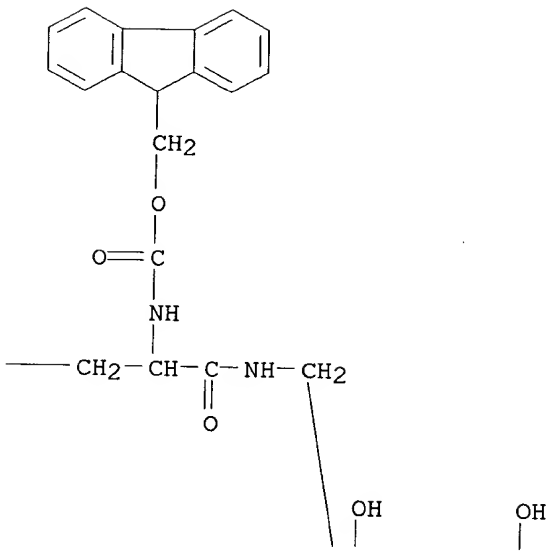
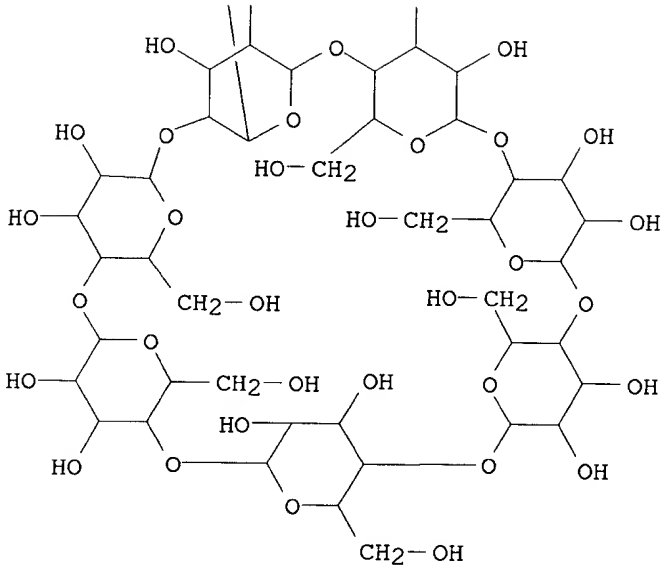


PAGE 2-A

PAGE 2-B



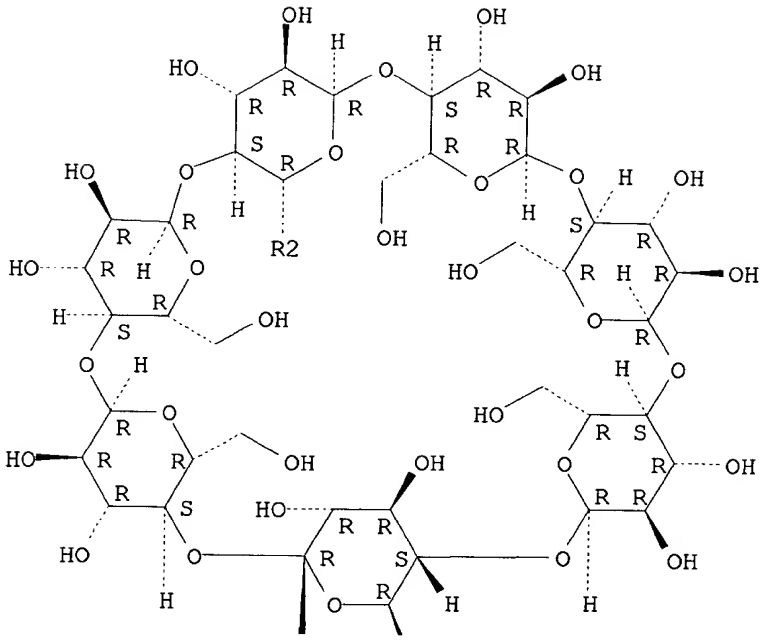
IT **197509-29-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(chemo-enzymic preparation oligosaccharide-branched **cyclodextrins** and their binding to proteins and lectins)

RN 197509-29-8 CAPLUS

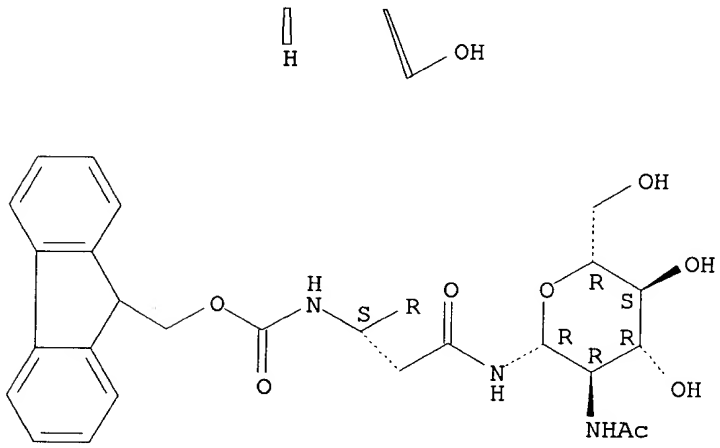
CN β-Cyclodextrin, 6A-[[(2S)-4-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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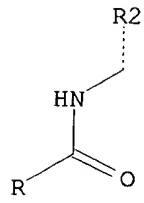
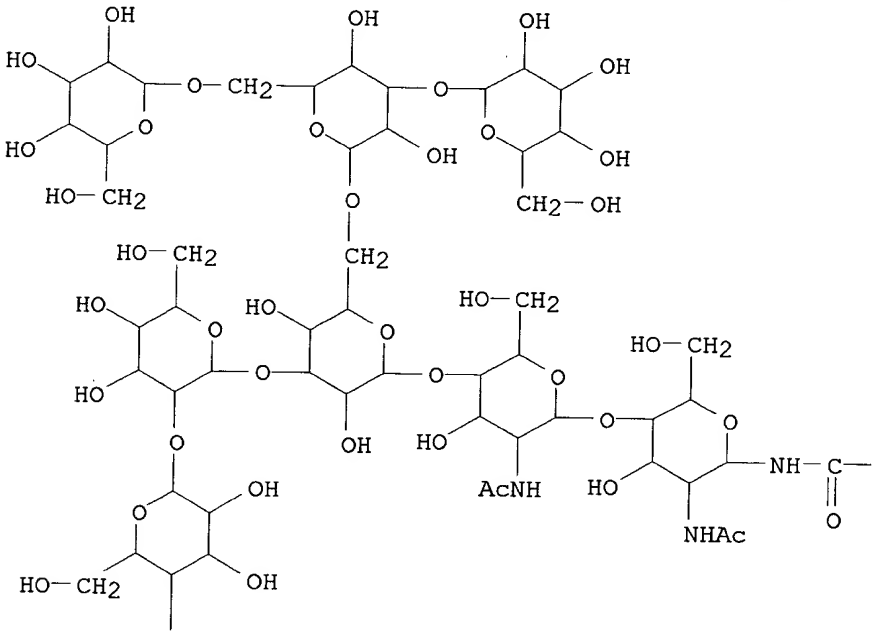


IT **197509-30-1DP**, Con A complex **197509-31-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(chemo-enzymic preparation oligosaccharide-branched **cyclodextrins** and their binding to proteins and lectins)

RN 197509-30-1 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[(2S)-4-[[O-α-D-mannopyranosyl-(1→3)-O-[α-D-mannopyranosyl-(1→6)]-O-α-D-mannopyranosyl-(1→6)-O-[O-α-D-mannopyranosyl-(1→2)-α-D-mannopyranosyl-(1→3)]-O-β-D-mannopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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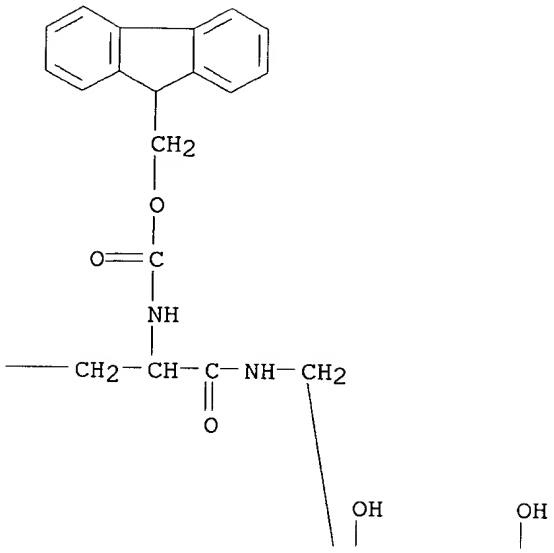

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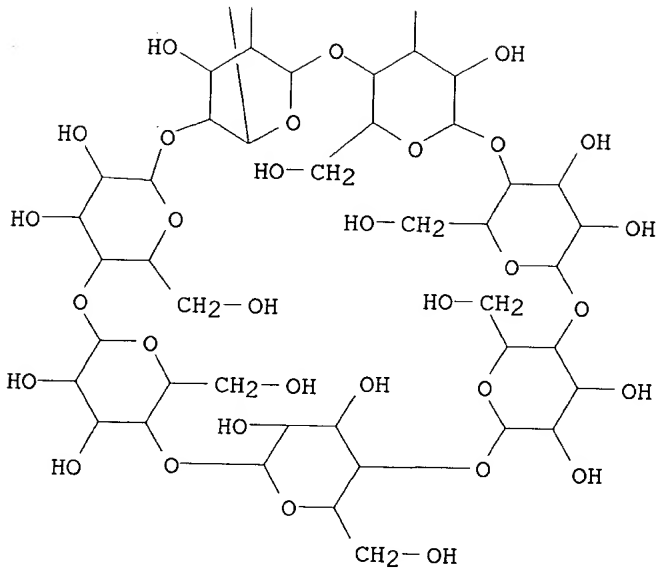
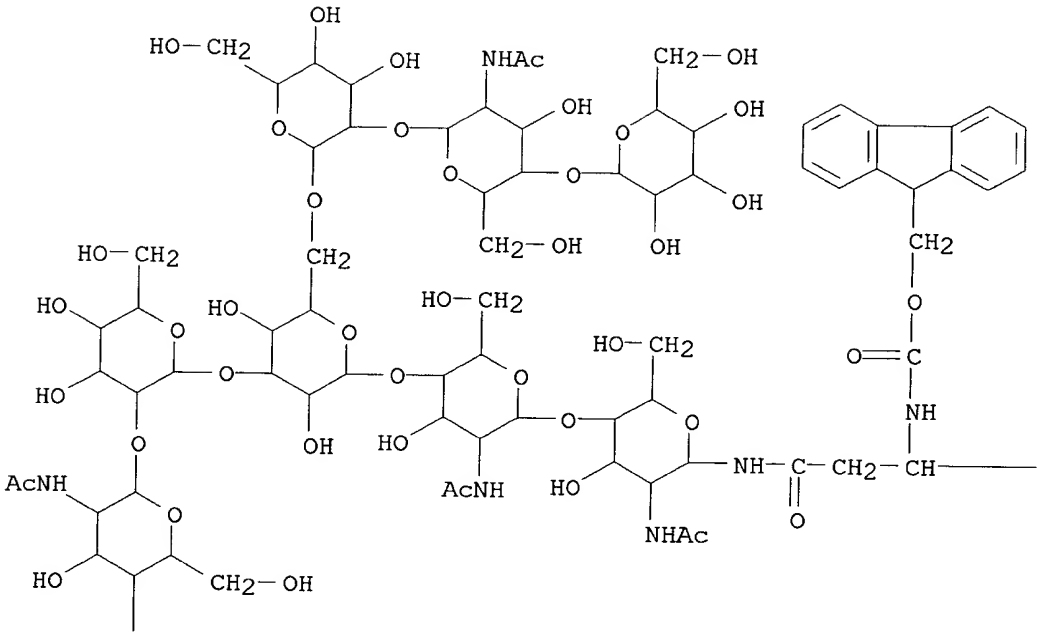
PAGE 2-B



RN 197509-31-2 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[(2S)-4-[[O-β-D-galactopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→2)-O-α-D-mannopyranosyl-(1→3)-O-[O-β-D-galactopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→2)-α-D-mannopyranosyl-(1→6)]-O-β-D-mannopyranosyl-(1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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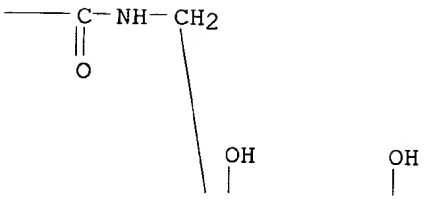

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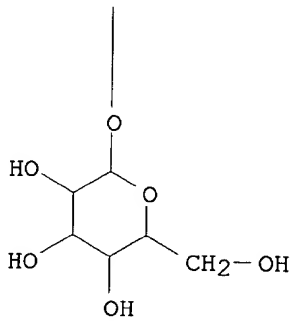

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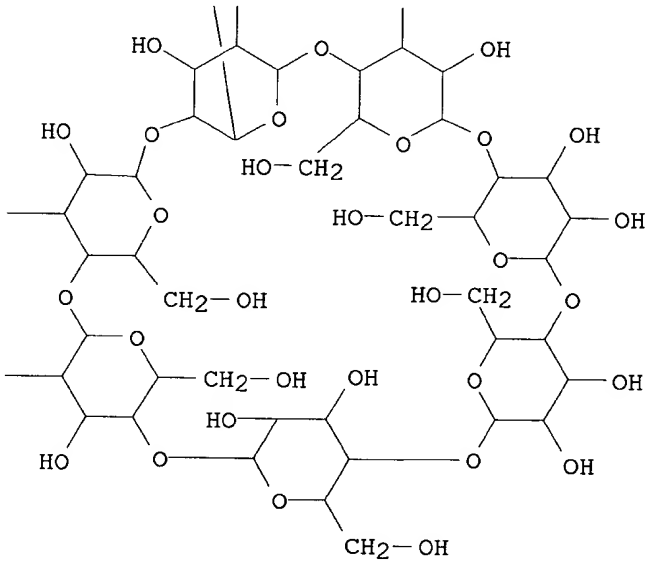
PAGE 2-B



L14 ANSWER 18 OF 34 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:175577 CAPLUS

DOCUMENT NUMBER: 126:277686

TITLE: A versatile synthesis of linked **cyclodextrins**

AUTHOR(S): Easton, Christopher J.; van Eyk, Steven J.; Lincoln, Stephe F.; May, Bruce L.; Papageorgiou, John; Williams, Michael L.

CORPORATE SOURCE: Res. Sch. Chem., Australian National Univ., Canberra, 0200, Australia

SOURCE: Australian Journal of Chemistry (1997), 50(1), 9-12
CODEN: AJCHAS; ISSN: 0004-9425

PUBLISHER: Commonwealth Scientific and Industrial Research Organization

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Reactions of amino-substituted **cyclodextrins** with bis(3-nitrophenyl) oxalate, malonate, succinate and glutarate, and with di-Ph carbonate, afford a range of linked **cyclodextrins**. These include α- and β- **cyclodextrin** dimers, joined by substitution at either C6 or C3, and asym. species with a β-**cyclodextrin** bonded to an α- **cyclodextrin** and a C3-substituted **cyclodextrin** attached to a C6-substituted moiety.

IT **130912-22-0P 130912-23-1P 130912-24-2P 138166-05-9P 180297-25-0P 188947-69-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of linked **cyclodextrins**)

RN 130912-22-0 CAPLUS

CN α-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 130912-23-1 CAPLUS

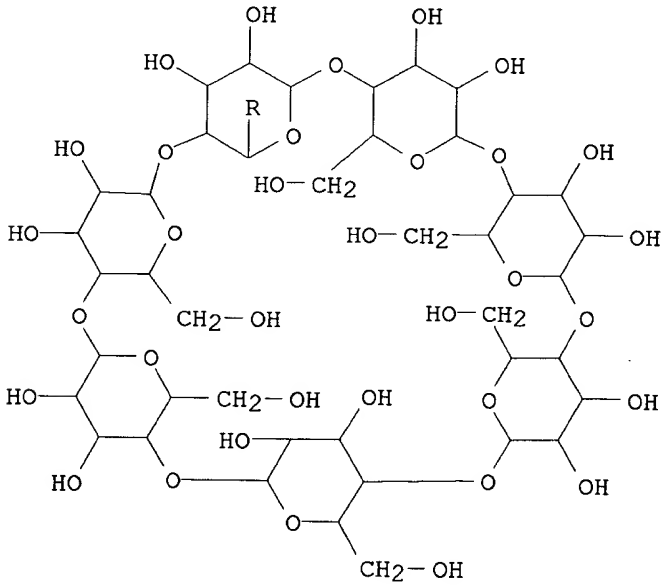
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 130912-24-2 CAPLUS

CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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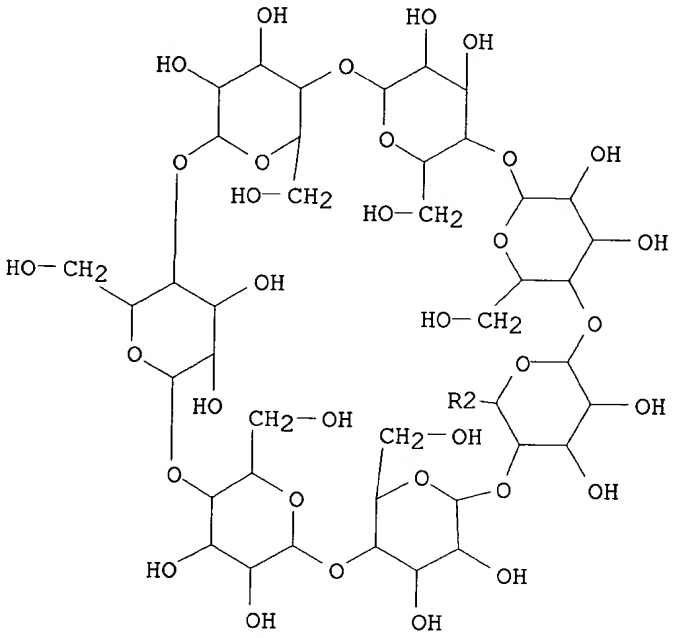

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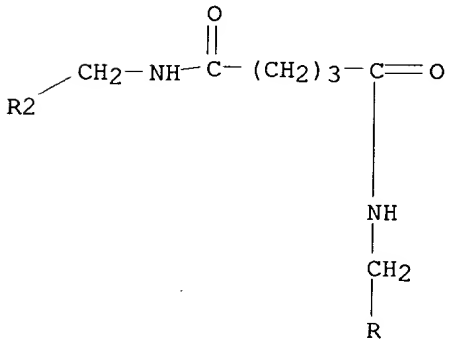
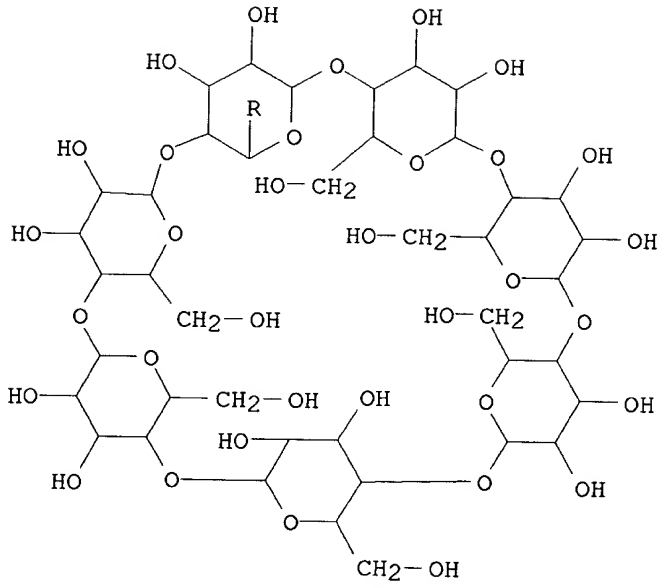


RN 138166-05-9 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[(6A-deoxy-α-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 180297-25-0 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,3-dioxo-1,3-propanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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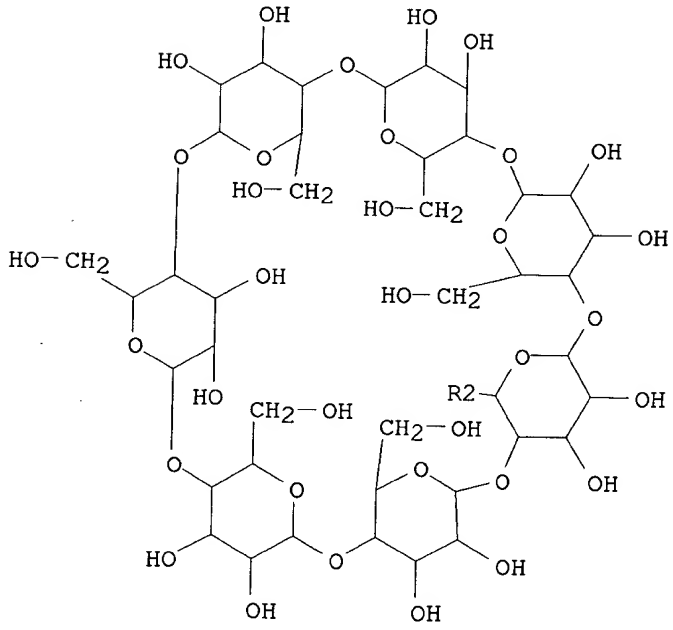

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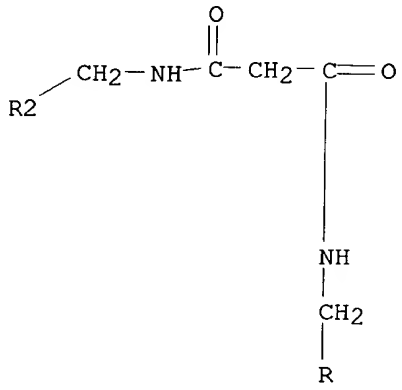

RN 188947-69-5 CAPLUS
CN β-Cyclodextrin, 3A-deoxy-3A-[[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]amino]-, (2AS,3AS)- (9CI) (CA INDEX NAME)

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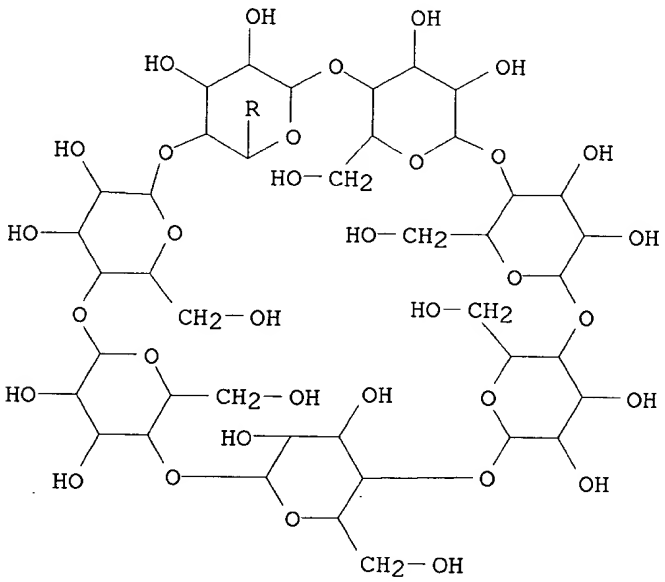
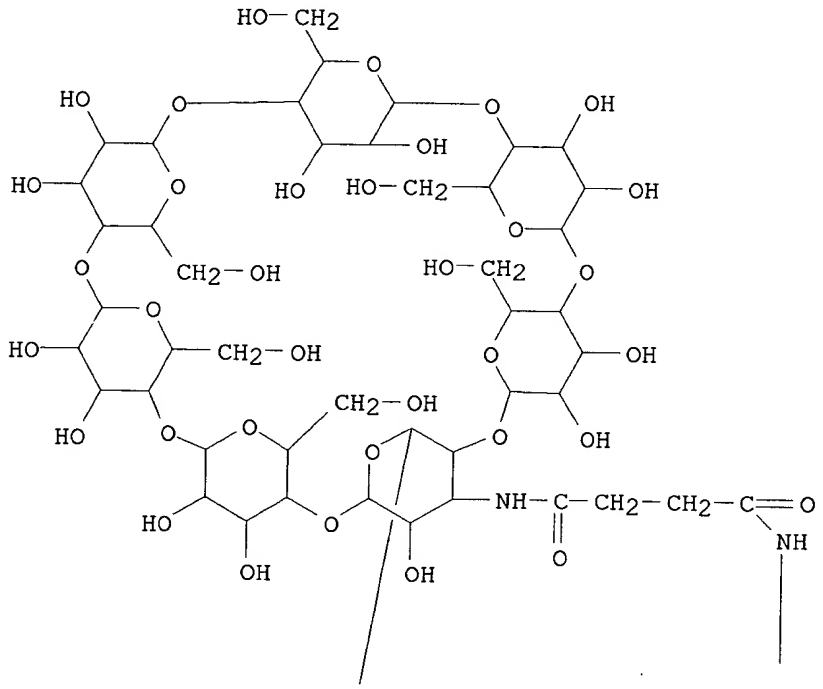
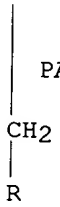


PAGE 2-A



PAGE 3-A



L14 ANSWER 19 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:123417 CAPLUS
DOCUMENT NUMBER: 126:225465
TITLE: Complexation of methyl orange and Tropaeolin 000 Number 2 by β- **cyclodextrin** dimers
AUTHOR(S): Haskard, Carolyn A.; May, Bruce L.; Kurucsev, Tomas; Lincoln, Stephen F.; Easton, Christopher J.
CORPORATE SOURCE: Department of Chemistry, University of Adelaide, South Australia, 5005, Australia
SOURCE: Journal of the Chemical Society, Faraday Transactions (1997), 93(2), 279-282
CODEN: JCFTEV; ISSN: 0956-5000
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Spectrophotometric studies of the complexation of Methyl orange (MO-) and Tropaeolin 000 Number 2 (TR-) anions by dimeric N,N'-bis(6A-deoxy-6A-β-**cyclodextrin**)urea (βCD)2ur and its oxalamide and succinamide analogs, (βCD)2ox and (βCD)2su, resp., are consistent with the predominant formation of complexes of the general formulas (βCD)2x·MO- characterized by stability consts. K1 = (1.05 ± 0.04) + 105, (1.92 ± 0.04) + 105 and (2.50 ± 0.02) + 104 dm3 mol-1 and (βCD)2x·TR- characterized by K1 = (1.39 ± 0.03) + 104, (7.4 ± 0.1) + 103 and (4.60 ± 0.05) + 103 dm3 mol-1, in aqueous phosphate buffer at pH 9.0 and 5.5 and 298.2 K. These values are significantly greater than K1 = 2160 and 710 dm3 mol-1 for the β- **cyclodextrin** complexes, βCD·MO- and βCD·TR- and are indicative of cooperative binding in (βCD)2x·MO- and (βCD)2x·TR- . The factors affecting complex stability are discussed and comparisons are made with related systems.

IT **188357-80-4P 188358-73-8P 188358-75-0P 188358-77-2P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(inclusion complexation of methyl orange and tropaeolin by β-**cyclodextrin** dimers)

RN 188357-80-4 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy-, compd. with sodium 4-[[4-(dimethylamino)phenyl]azo]benzenesulfonate (1:1) (9CI) (CA INDEX NAME)

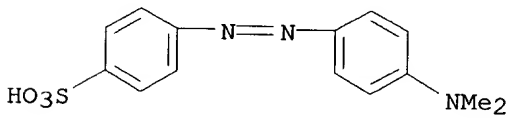
CM 1

CRN 130912-23-1
CMF C88 H144 N2 O70

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 547-58-0
CMF C14 H15 N3 O3 S . Na



● Na

RN 188358-73-8 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy-, compd. with 4-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

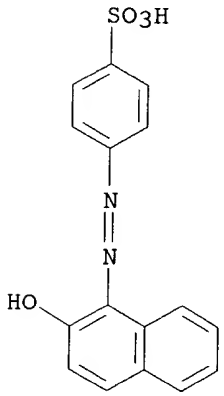
CRN 130912-23-1

CMF C88 H144 N2 O70

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 633-96-5
CMF C16 H12 N2 O4 S . Na



● Na

RN 188358-75-0 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy-, compd. with 4-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonic acid monosodium salt (1:2) (9CI) (CA INDEX NAME)

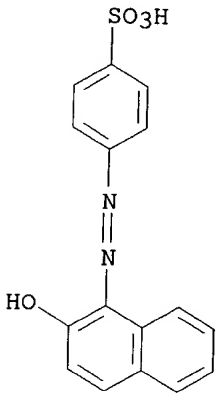
CM 1

CRN 130912-23-1
CMF C88 H144 N2 O70

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 633-96-5
CMF C16 H12 N2 O4 S . Na



● Na

RN 188358-77-2 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy-, compd. with 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid monosodium salt (1:1) (9CI) (CA INDEX NAME)

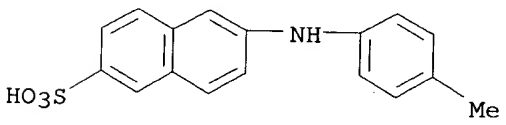
CM 1

CRN 130912-23-1
CMF C88 H144 N2 O70

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 53313-85-2
CMF C17 H15 N O3 S . Na



● Na

L14 ANSWER 20 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:491249 CAPLUS
DOCUMENT NUMBER: 125:215415
TITLE: **Cyclodextrins** as templates for the presentation of protease inhibitors
AUTHOR(S): Schaschke, N.; Musiol, H.-J.; Assfalg-Machleidt, I.; Machleidt, W.; Rudolph-Boehner, S.; Moroder, L.
CORPORATE SOURCE: Max-Planck-Institut fuer Biochemie, AG Bioorganische

Chemie, Am Klopferspitz 18A, Martinsried, 82152, Germany
SOURCE: FEBS Letters (1996), 391(3), 297-301
CODEN: FEBLAL; ISSN: 0014-5793
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:215415

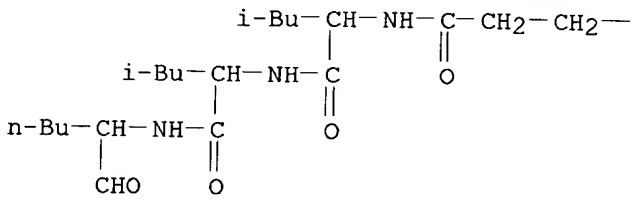
AB Mono(6-succinylamido-6-deoxy)-β- **cyclodextrin** was synthesized by classical carbohydrate chem. and used as a template mono-functionalized with the linear, fully flexible 4C-spacer carboxylate for covalent linkage of the calpain inhibitor leucyl-leucyl-norleucinal. Spectroscopic analyses of the conjugate do not support a self-inclusion of part of the hydrophobic peptide tail, but confirm its intra-or intermol. interaction with the template moiety that leads to full water solubility The inhibitory potency of the β- **cyclodextrin**/peptide aldehyde construct was compared with that of the parent Ac-Leu-Leu-Nle-H against cathepsin B and calpain. Despite the large size of the template the inhibition of cathepsin B was only slightly reduced in full agreement with the X-ray structure of this enzyme which shows full accessibility of the S-subsites. For this enzyme the 4C-spacer is apparently sufficient to guarantee optimal interaction of the peptide tail with the binding cleft. Conversely, for μ-calpain a significantly decreased inhibitory potency was obtained with the conjugate suggesting steric interference of the template in the binding process. These results show that the beneficial properties of the **cyclodextrin** template can be retained in conjugates with bioactive peptides if attention is paid to optimize in each case the size and nature of the spacer for optimal recognition of the grafted biomol.

IT **181487-21-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of **cyclodextrin** conjugates for presentation of protease inhibitors)

RN 181487-21-8 CAPLUS

CN L-Norleucine, N-[N-[N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-leucyl]-L-leucyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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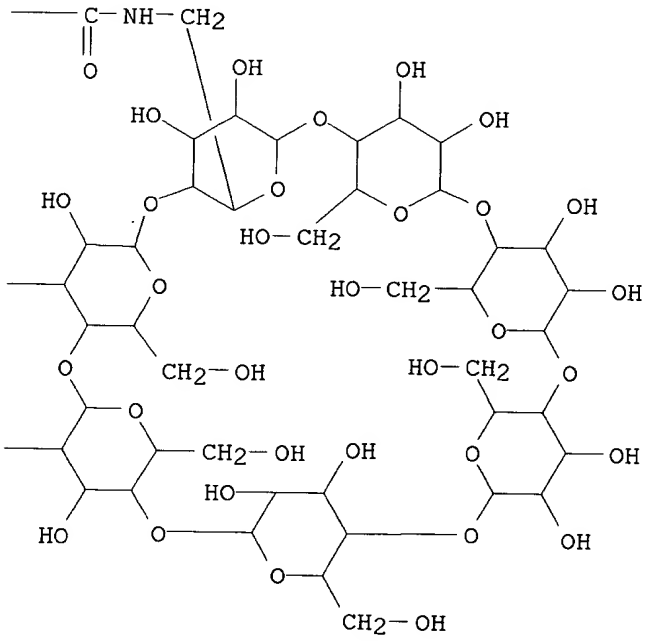
PAGE 1-B



L14 ANSWER 21 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:464422 CAPLUS
DOCUMENT NUMBER: 125:167156
TITLE: Cooperative Binding of 6-(p-Toluidinyl)naphthalene-2-sulfonate by β- **Cyclodextrin** Dimers complex
AUTHOR(S): Haskard, Carolyn A.; Easton, Christopher J.; May,

Bruce L.; Lincoln, Stephen F.
CORPORATE SOURCE: Department of Chemistry, University of Adelaide, 5005, Australia
SOURCE: Journal of Physical Chemistry (1996), 100(34), 14457-14461
CODEN: JPCHAX; ISSN: 0022-3654
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A fluorimetric study shows that 6-(p-toluidinyl)naphthalene-2-sulfonate (TNS-) forms binary complexes with dimeric N,N'-bis(6A-deoxy-6A-β-**cyclodextrin**)glutaramide and its succinamide, malonamide, oxalamide, and urea analogs characterized by stability consts. 13 010 ± 20, 16 700 ± 20, 11 000 ± 10, 32 640 ± 90, and 45 230 ± 70 dm3 mol-1, resp., in aqueous phosphate buffer at pH 7.0, I = 0.10 dm3 mol-1 and 298.2 K. These values are substantially greater than that for the β-**cyclodextrin**·TNS- complex and are indicative of collaborative binding in the β- **cyclodextrin** dimer complexes. The factors affecting the stabilities of the **cyclodextrin** dimer complexes and their fluorescence characteristics are discussed, and comparisons are made with related systems.

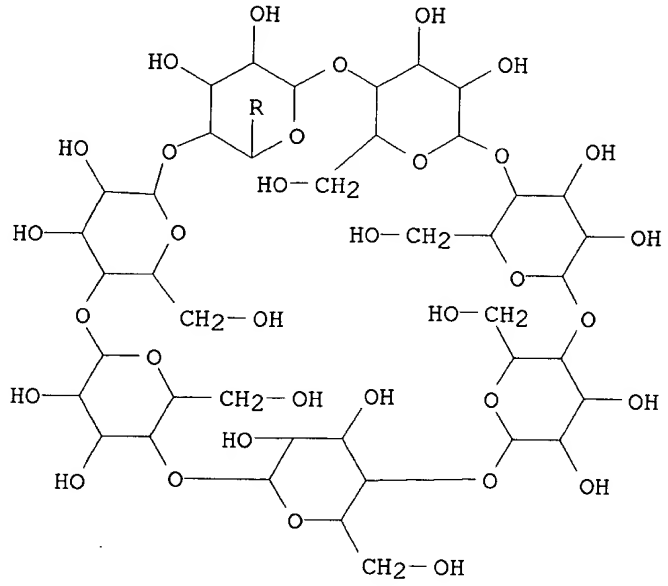
IT **180297-26-1 180469-39-0 180469-40-3**
RL: PRP (Properties)
(stability consts. for binary complexes of dimer β-**cyclodextrins** with 6-(p-toluidinyl)naphthalene-2-sulfonate in aqueous phosphate buffer)

RN 180297-26-1 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,3-dioxo-1,3-propanediyl)diimino]bis[6A-deoxy-, compd. with 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid ion(1-) (1:1) (9CI) (CA INDEX NAME)

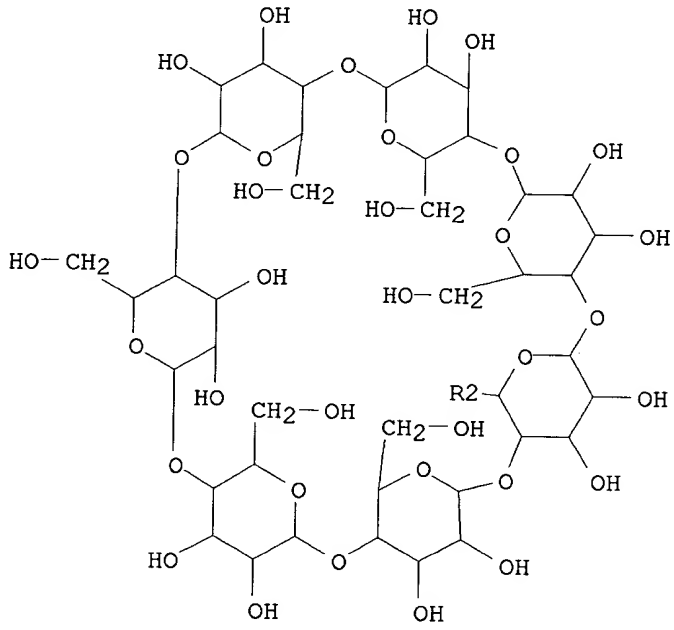
CM 1

CRN 180297-25-0
CMF C87 H142 N2 O70

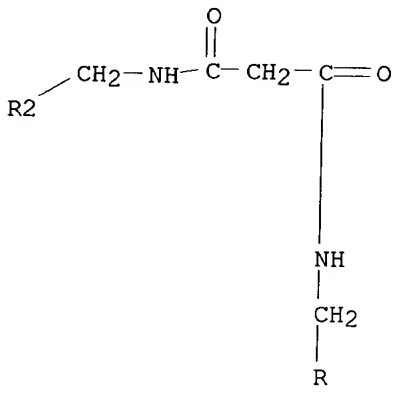
PAGE 1-A



PAGE 2-A

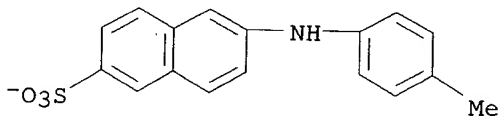


PAGE 3-A



CM 2

CRN 20096-84-8
CMF C17 H14 N O3 S

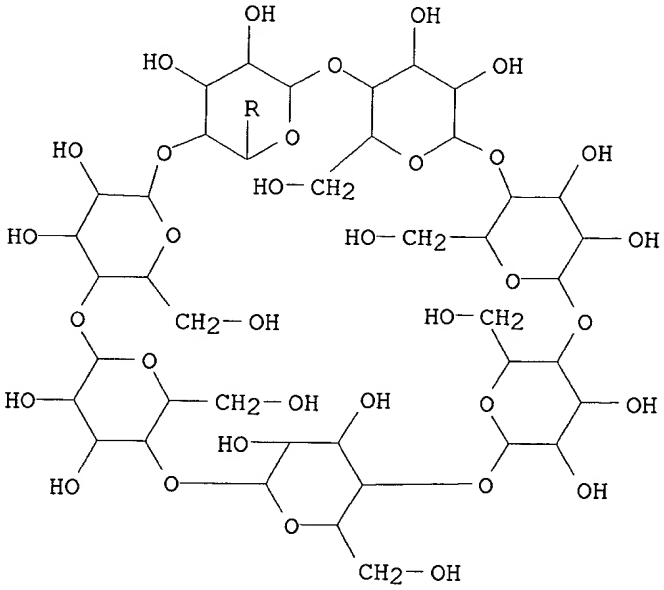


RN 180469-39-0 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy-, compd. with 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid ion(1-) (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 130912-24-2
CMF C89 H146 N2 O70

PAGE 1-A



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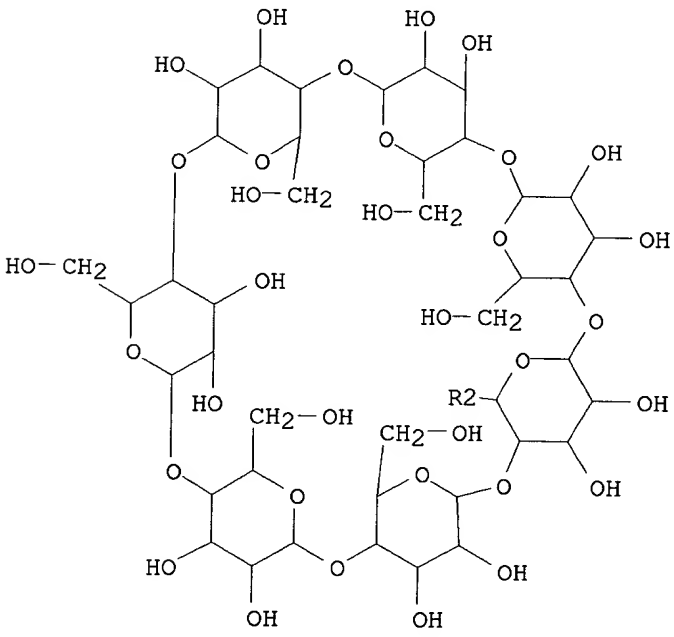
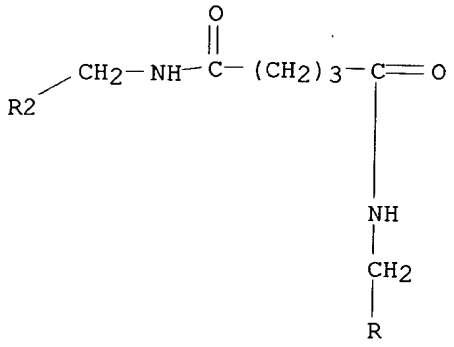
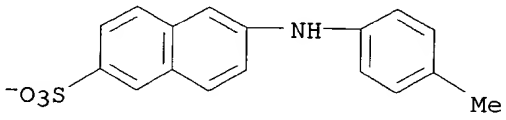


PAGE 3-A



CM 2

CRN 20096-84-8
CMF C17 H14 N O3 S



RN 180469-40-3 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy-, compd. with 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid ion(1-) (1:1) (9CI) (CA INDEX NAME)

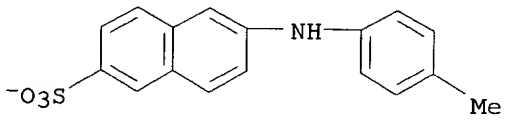
CM 1

CRN 130912-23-1
CMF C88 H144 N2 O70

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 20096-84-8
CMF C17 H14 N O3 S



L14 ANSWER 22 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:752253 CAPLUS
DOCUMENT NUMBER: 123:218332

TITLE: Reduction of the hemolytic effect in a biologically recognizable β- **cyclodextrin**

AUTHOR(S): Leray, E.; Leroy-Lechat, F.; Parrot-Lopez, H.; Duchene, D.

CORPORATE SOURCE: l"Groupe Cyclodextrines Amphiphiles", BIOCIS, Villeurbanne, FG9622, Fr.

SOURCE: Supramolecular Chemistry (1995), 5(2), 149-51
CODEN: SCHEER; ISSN: 1061-0278

PUBLISHER: Gordon & Breach

DOCUMENT TYPE: Journal

LANGUAGE: English

AB β- **Cyclodextrin** derivs. having azido, amino and bioactive galactosylamido spacer functions were tested for hemolytic effect and compared with that of hydroxypropyl-β- **cyclodextrin**. The **cyclodextrin** coupled to the bioactive saccharide galactose via a spacer and which has bio-recognition properties for cell-wall lectin shows an extremely reduced hemolytic effect.

IT **156769-72-1**

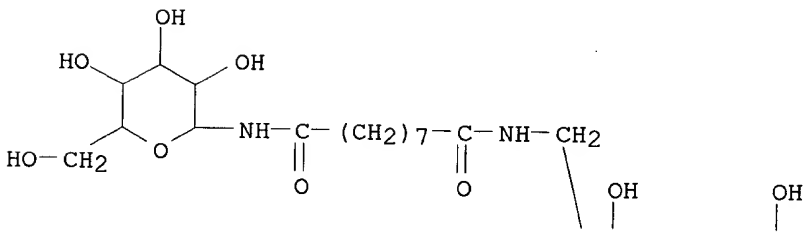
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(reduction of the hemolytic effect of β- **cyclodextrin** derivs.)

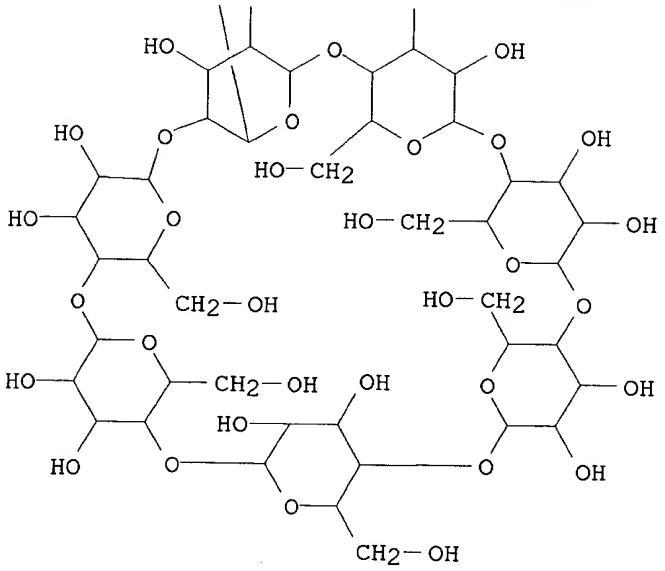
RN 156769-72-1 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[9-(β-D-galactopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L14 ANSWER 23 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:645724 CAPLUS
DOCUMENT NUMBER: 123:102013
TITLE: Recognition ability and cytotoxicity of some oligosaccharidyl substituted β-**cyclodextrins**
AUTHOR(S): Attioui, Fatima; Al-Omar, Anouar; Leray, Eric; Parrot-Lopez, Helene; Finance, Chantal; Bonaly, Roger
CORPORATE SOURCE: Faculte des Sciences Pharmaceutiques et Biologiques, Universite Henri Poincare Nancy 1, Nancy, 54001, Fr.
SOURCE: Biology of the Cell (1994), 82(2-3), 161-7
CODEN: BCELDF; ISSN: 0248-4900
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This paper reports a chemico-enzymic synthesis of β-CD derivs. The recognition properties of these derivs. were tested using flocculating yeast and isolated lectins. It was observed that the substitution of β-**cyclodextrins** with galactose end arms induces the better recognition by a cell-linked galactose-specific lectin. The physicochem. effects of the β-CD derivs. on membranes were evaporating using red blood cells and the effects on the viability of yeast and human rectal tumor cells were appreciated by measuring the mitochondrial dehydrogenase activity. The substitutions of the β-CD ring by sugar antennae decrease the neg. physicochem. effects of the β-CD, ie their hemolytic properties. However, these substitutions induce significant modifications of the biol. properties of the mols., particularly the cytotoxicity and the growth of eukaryotic cells.

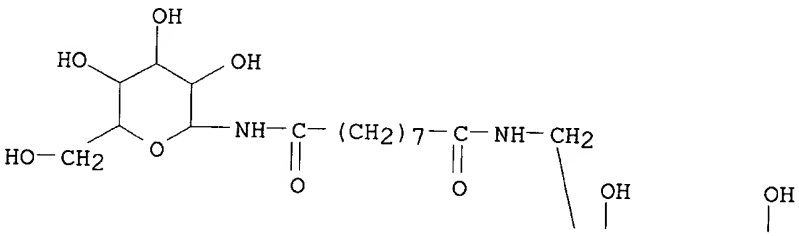
IT **156769-72-1 162425-01-6 166178-79-6**
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(recognition ability and cytotoxicity of oligosaccharidyl substituted

β- cyclodextrins)

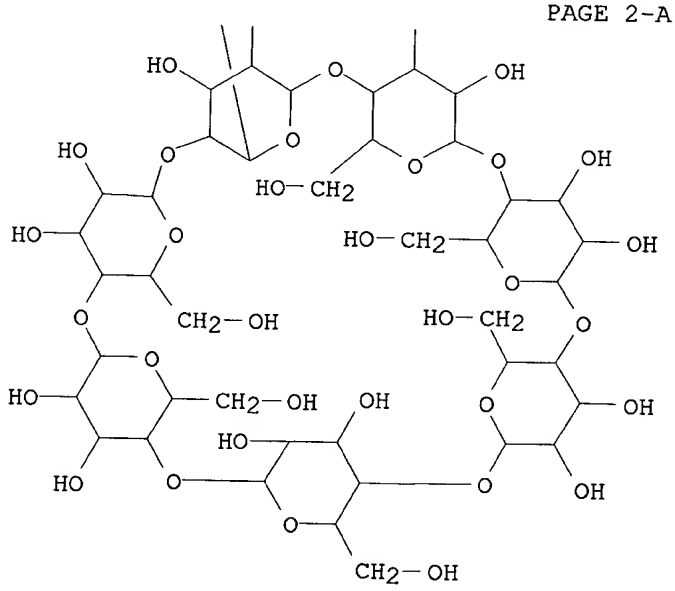
RN 156769-72-1 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[9-(β-D-galactopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

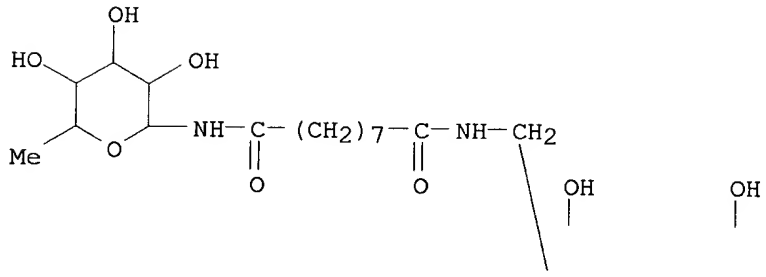


PAGE 2-A

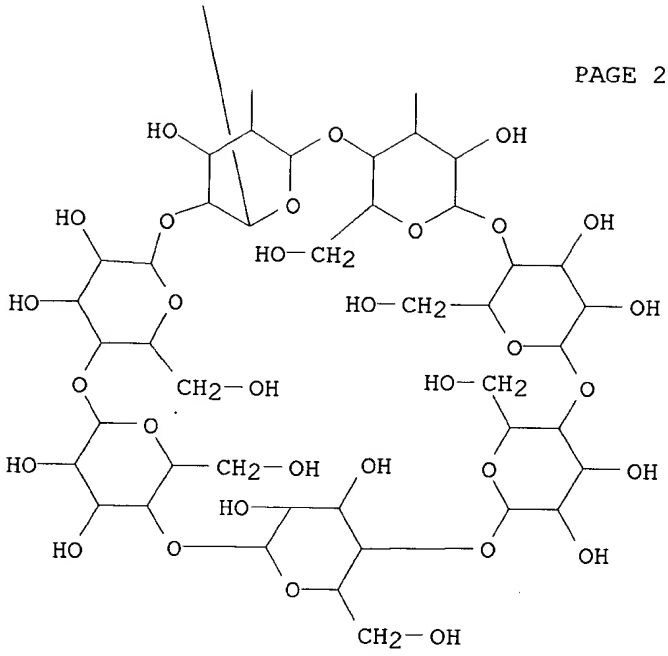


RN 162425-01-6 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[9-[(6-deoxy-β-L-galactopyranosyl)amino]-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

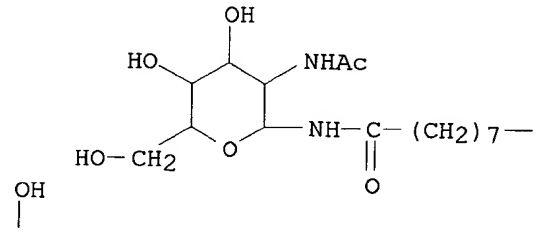


PAGE 2-A



RN 166178-79-6 CAPLUS
CN β-Cyclodextrin, 6A,6B-bis[[9-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]amino]-1,9-dioxononyl]amino]-6A,6B-dideoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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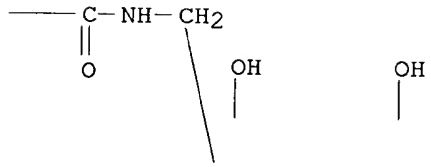


* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

L14 ANSWER 24 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:567871 CAPLUS
DOCUMENT NUMBER: 123:286424
TITLE: Remarkable molecular recognition of dansyl-modified **cyclodextrin** dimer
AUTHOR(S): Nakamura, Michiei; Ikeda, Tsukasa; Nakamura, Asao; Ikeda, Hiroshi; Ueno, Akihiko; Toda, Fujio
CORPORATE SOURCE: Dep. Bioeng., Tokyo Inst. Technol., Yokohama, 226, Japan
SOURCE: Chemistry Letters (1995), (5), 343-4
CODEN: CMLTAG; ISSN: 0366-7022
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Dansyl-modified β- **cyclodextrin** dimer changes fluorescence intensity depending on the mol. species in aqueous solution and exhibits remarkable mol. recognition for steroidal compds.
IT **169062-02-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(inclusion reaction of dansyl-modified **cyclodextrin** dimer with steroids)

RN 169062-02-6 CAPLUS

CN β-Cyclodextrin, 6A,6'A-[[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-1,4-dioxo-1,4-butanediyl]diimino]bis[6A-deoxy-, (S)- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **169438-31-7P 169438-32-8P 169438-33-9P 169438-34-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(inclusion reaction of dansyl-modified **cyclodextrin** dimer with steroids)

RN 169438-31-7 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3α,5β,7β)-, compd. with 6A,6'A-[[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-1,4-dioxo-1,4-butanediyl]diimino]bis[6A-deoxy-β-cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169062-02-6

CMF C100 H156 N4 O72 S

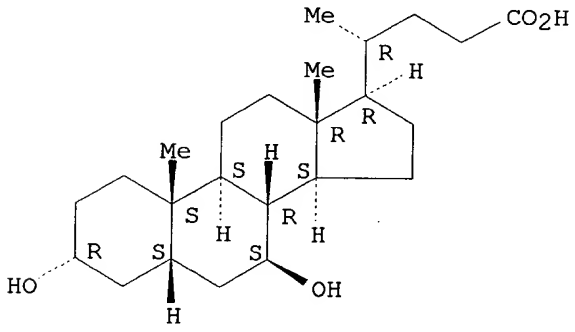
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



RN 169438-32-8 CAPLUS

CN Cholan-24-oic acid, 3,12-dihydroxy-, (3α,5β,12α)-, compd. with 6A,6'A-[[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-1,4-dioxo-1,4-butanediyl]diimino]bis[6A-deoxy-β-cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169062-02-6

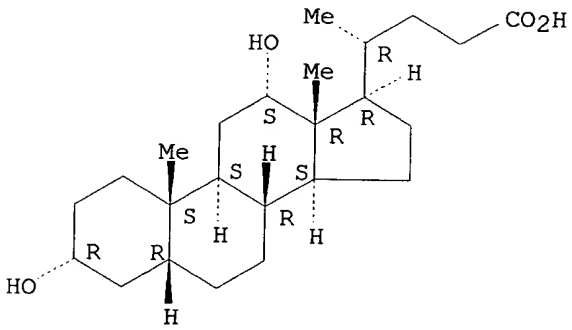
CMF C100 H156 N4 O72 S

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 83-44-3
CMF C24 H40 O4

Absolute stereochemistry.



RN 169438-33-9 CAPLUS
CN Cholan-24-oic acid, 3,7,12-trihydroxy-, (3α,5β,7α,12.alph
a.)-, compd. with 6A,6'A-[[2-[[[5-(dimethylamino)-1-
naphthalenyl]sulfonyl]amino]-1,4-dioxo-1,4-butanediyl]diimino]bis[6A-deoxy-
β-cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

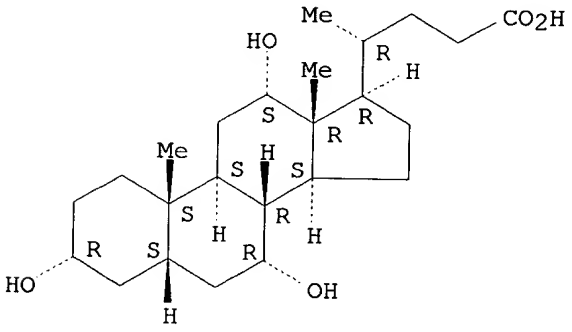
CRN 169062-02-6
CMF C100 H156 N4 O72 S

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 81-25-4
CMF C24 H40 O5

Absolute stereochemistry.



RN 169438-34-0 CAPLUS
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3α,5β,7α)-, compd. with 6A,6'A-[[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-1,4-dioxo-1,4-butanediyl]diimino]bis[6A-deoxy-β-cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

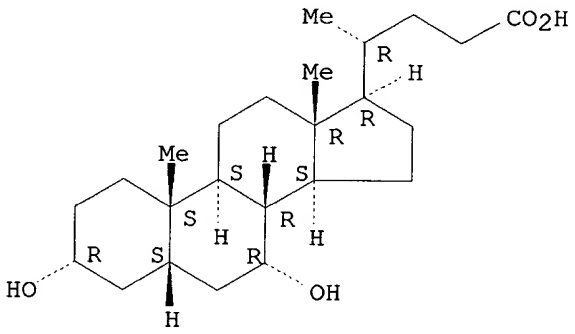
CRN 169062-02-6
CMF C100 H156 N4 O72 S

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 474-25-9
CMF C24 H40 O4

Absolute stereochemistry.



L14 ANSWER 25 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:38514 CAPLUS
DOCUMENT NUMBER: 122:240200
TITLE: New β- **cyclodextrin** derivatives possessing biologically active saccharide antennae
AUTHOR(S): Parrot-Lopez, Helene; Leray, Eric; Coleman, Anthony W.
CORPORATE SOURCE: "Groupe Cyclodextrines Amphiphiles", Universite de Paris XI, Chatenay-Malabry, F92296, Fr.
SOURCE: Supramolecular Chemistry (1993), 3(1), 37-42
CODEN: SCHEER; ISSN: 1061-0278
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The synthesis of monosubstituted β- **cyclodextrin** derivs. having the monosaccharides, β-D-glucose, β-D-galactose, α-D-mannose, β-L and β-D-fucose linked to the macrocycle via a C9 spacer chain is described. The approach is based on the highly efficient coupling of the isothiocyanate sugar to monomethyl nonandedicarboxylate to generate a stable amido linkage. The NMR studies show the saccharide antennae to be oriented into the environment and not towards the CD cavity.

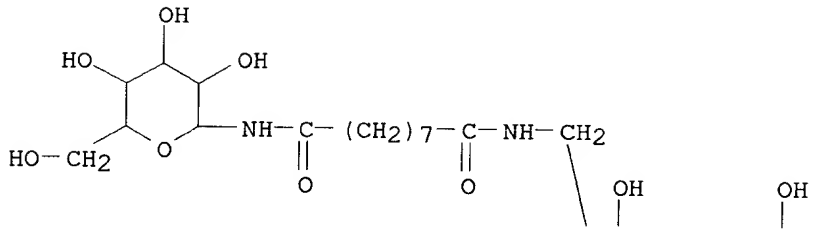
IT **156769-72-1P 162265-61-4P 162424-98-8P 162425-01-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn of β- **cyclodextrin** derivs. possessing biol. active saccharide antennae)

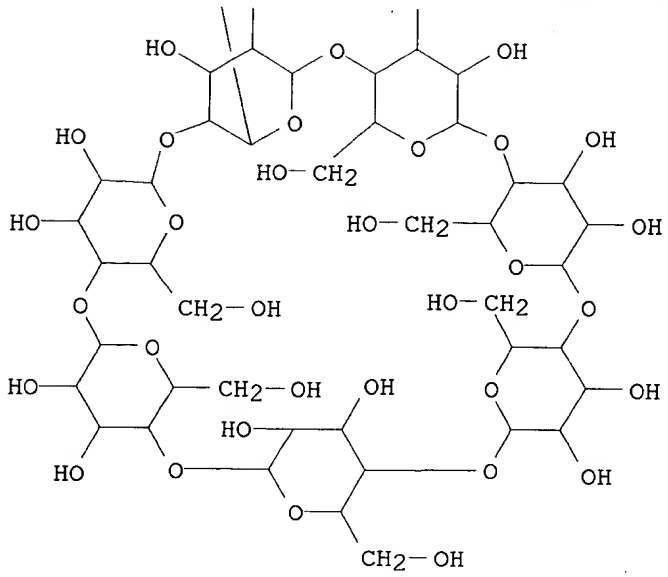
RN 156769-72-1 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[9-(β-D-galactopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

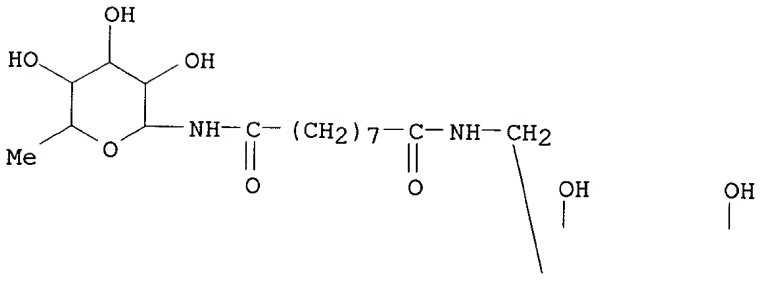


PAGE 2-A



RN 162265-61-4 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[9-[(6-deoxy-β-D-galactopyranosyl)amino]-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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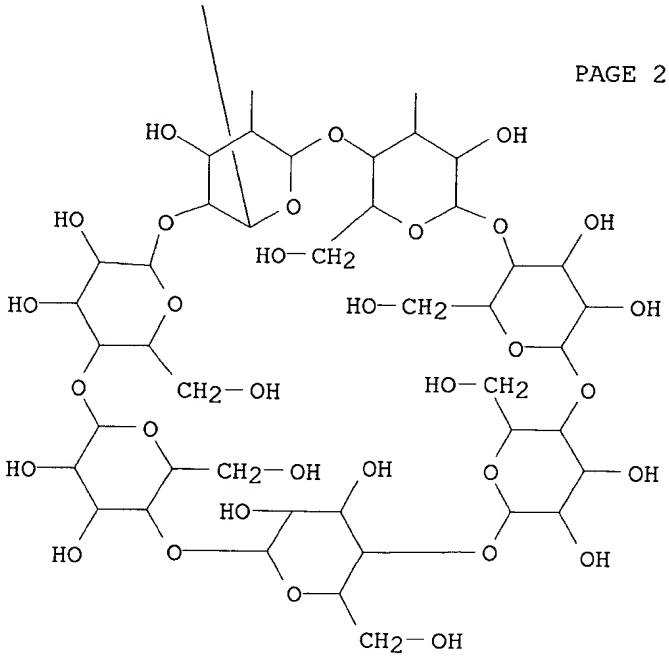
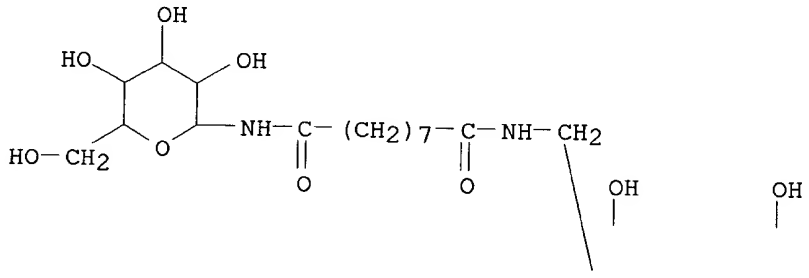


RN 162424-98-8 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[9-(α-D-mannopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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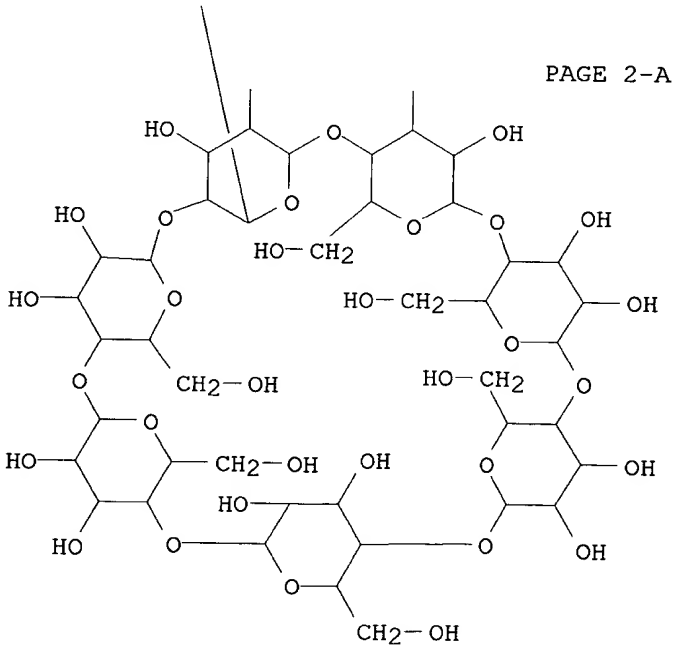
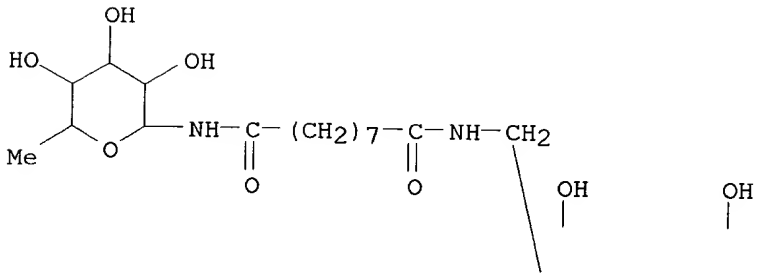


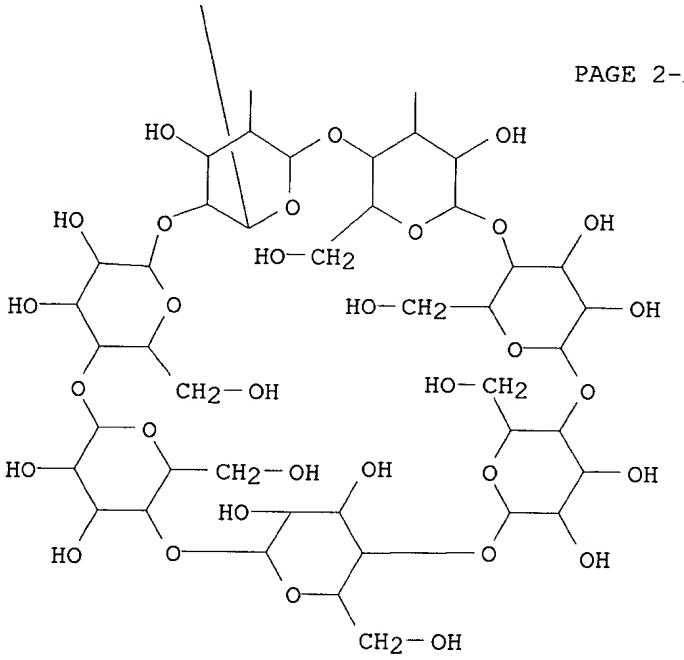
RN 162425-01-6 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[9-[(6-deoxy-β-L-galactopyranosyl)amino]-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

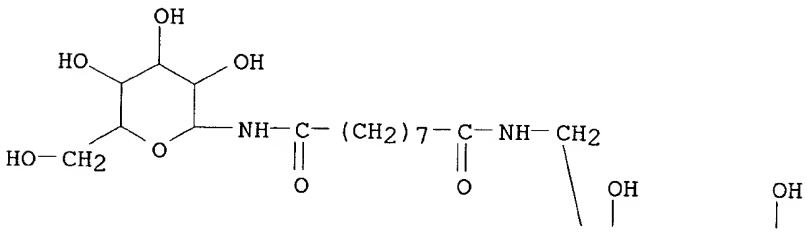


L14 ANSWER 26 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:491607 CAPLUS
DOCUMENT NUMBER: 121:91607
TITLE: Synthesis of new oligosaccharide-thio-β-**cyclodextrins** (CDS): a novel family of potent drug-targetting vectors
AUTHOR(S): de Robertis, Laurence; Lancelon-Pin, Christine; Driguez, Hugues; Attioui, Fatima; Bonaly, Roger; Marsura, Alain
CORPORATE SOURCE: CERMAV, CNRS, Grenoble, 38041, Fr.
SOURCE: Bioorganic & Medicinal Chemistry Letters (1994), 4(9), 1127-30
CODEN: BMCLE8; ISSN: 0960-894X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Six potential carriers incorporating one or more thio-D-galactosyl residue(s) linked to β- **cyclodextrin** as complexing tool, were prepared and evaluated in vitro for their specific recognition towards a cell wall galactose specific lectin (KbCWL). The inhibition of yeast flocculation by the compds. was compared to reference compds., p-nitrophenyl-galactose or disaccharides containing an α or β-galactose non reducing terminal unit. The heptkisgalactosyl-CD derivs. were the most efficient compds.

IT **156769-72-1**
RL: PROC (Process)
(drug carrier properties and lectin binding of)
RN 156769-72-1 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[9-(β-D-galactopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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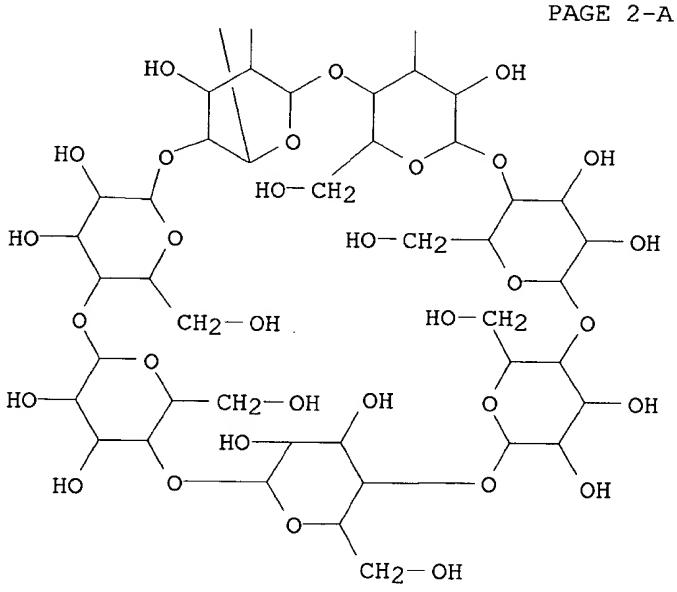


L14 ANSWER 27 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:409838 CAPLUS
DOCUMENT NUMBER: 121:9838

TITLE: Synthesis of **cyclodextrin** heterodimer having α- and β- **cyclodextrin** units and its cooperative and site-specific binding

AUTHOR(S): Wang, Yong; Ueno, Akihiko; Toda, Fujio
CORPORATE SOURCE: Fac. Biosci. Biotechnol., Tokyo Inst. Technol., Yokohama, 227, Japan

SOURCE: Chemistry Letters (1994), (1), 167-70
CODEN: CMLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A **cyclodextrin** heterodimer, which has α- and β- **cyclodextrin** units as two different receptor sites, was prepared It showed cooperative and site-specific binding to isoamyl p-dimethylaminobenzoate with the alkyl group included in the β- **cyclodextrin** cavity while dimethylaminobezene moiety partially included in the α- **cyclodextrin** cavity. This binding mode was substantiated by the fact the TICT emission of this guest is greatly enhanced by the **cyclodextrin** heterodimer.

IT **155750-47-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and fluorescence emission spectra of)

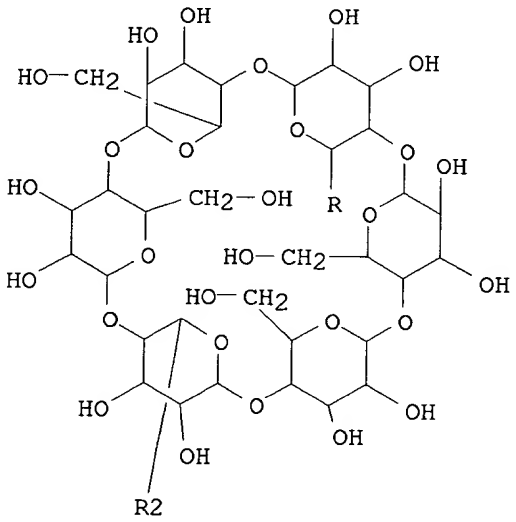
RN 155750-47-3 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[3-[(6A-deoxy-α-cyclodextrin-6A-yl)amino]-1,3-dioxopropyl]amino]-, compd. with 3-methylbutyl 4-(dimethylamino)benzoate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 155688-28-1
CMF C81 H132 N2 O65

PAGE 1-A



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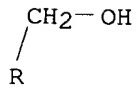

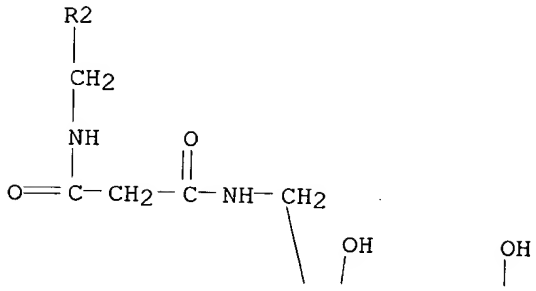

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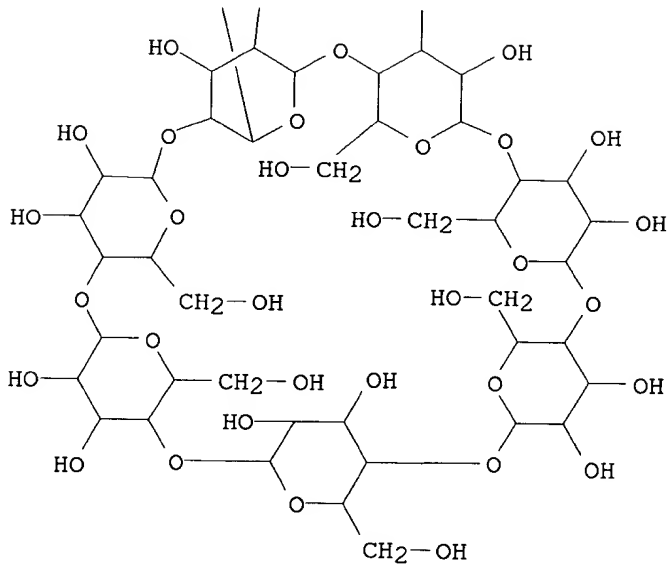

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CRN 21245-01-2
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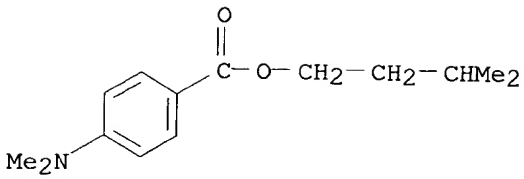
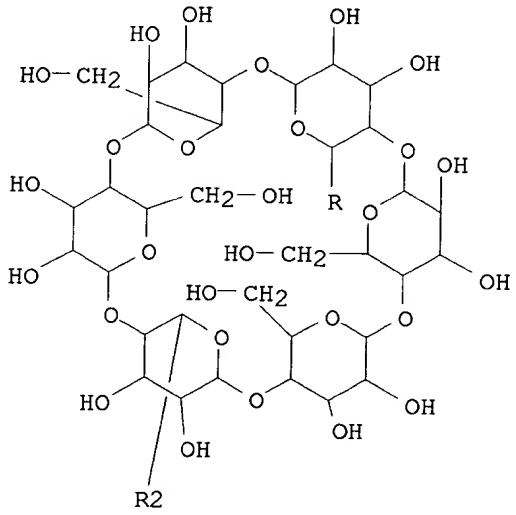


IT **155688-28-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and inclusion reaction of, with isoamyl p-dimethylaminobenzoate)
RN 155688-28-1 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[3-[(6A-deoxy-α-cyclodextrin-6A-yl)amino]-1,3-dioxopropyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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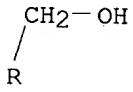

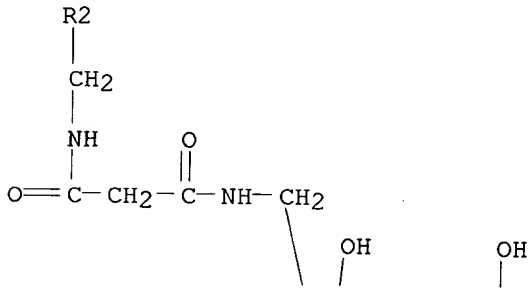

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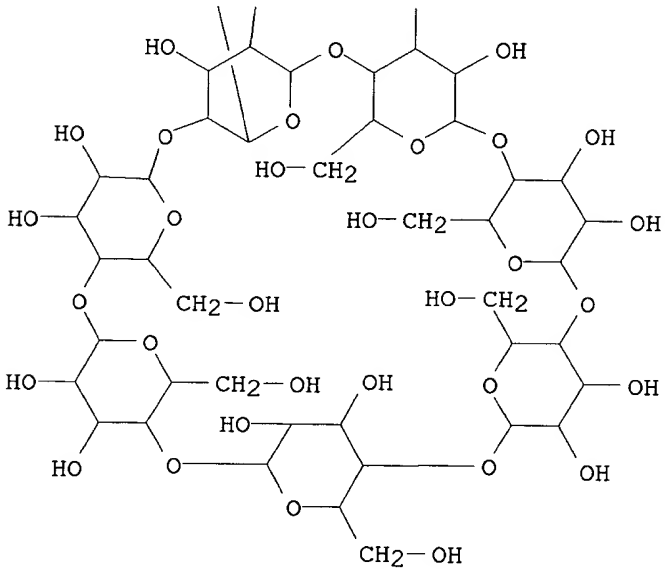


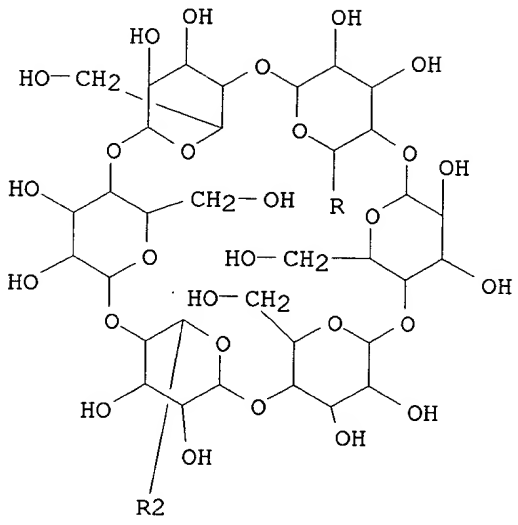
IT **155750-48-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 155750-48-4 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[3-[(6A-deoxy-α-cyclodextrin-6A-

yl)amino]-1,3-dioxopropyl]amino]-, compd. with 2-butoxyethyl 4-(dimethylamino)benzoate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 155688-28-1
CMF C81 H132 N2 O65

PAGE 1-A



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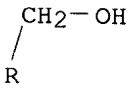

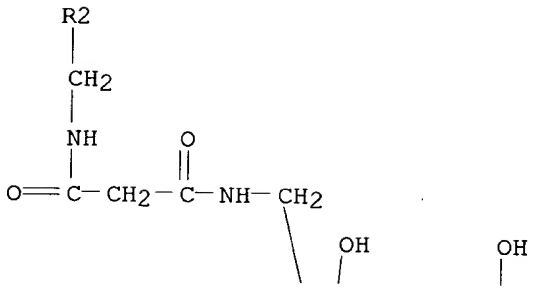

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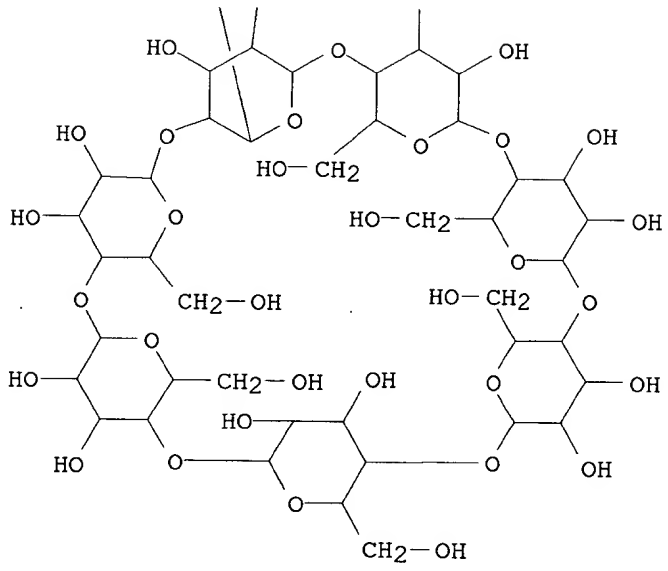
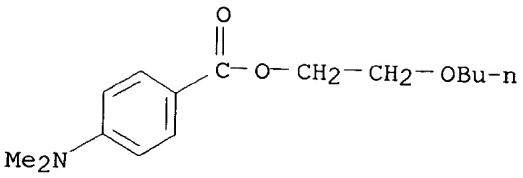


CM 2

CRN 67362-76-9
CMF C15 H23 N O3



L14 ANSWER 28 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:62264 CAPLUS
DOCUMENT NUMBER: 120:62264
TITLE: **Cyclodextrin** derivative preparation, and formulated drugs of inclusion complexes of Propofol or Alfaxalone with the modified **cyclodextrins**
INVENTOR(S): Palmer, Clive Frederick; Ho, Paul Chi Cui; Brown, Susan Elisabeth; May, Bruce Lindley; Schiesser, Deborah Susanne; Luo, Yin; Dennis, Nicholas; Lincoln, Stephen Frederick; Coates, John Hewlett; et al.
PATENT ASSIGNEE(S): Australian Commercial Research and Development Ltd., Australia
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9317711	A1	19930916	WO 1993-AU100	19930309
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9336241	A1	19931005	AU 1993-36241	19930309
EP 630261	A1	19941228	EP 1993-905115	19930309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.:

AU 1992-1288	19920311
AU 1992-1915	19920415
AU 1992-2182	19920429
AU 1992-3612	19920720
AU 1992-3673	19920723
AU 1992-3674	19920723
AU 1992-3836	19920731
AU 1992-4119	19920817
AU 1992-4409	19920831
AU 1992-4747	19920917
AU 1993-7061	19930202
WO 1993-AU100	19930309

OTHER SOURCE(S): MARPAT 120:62264
AB Inclusion complexes are disclosed which comprise Propofol or Alfaxalone (I) and a **cyclodextrin** derivative The inclusion complexes increase the solubility of these 2 anesthetics. Preparation of the cyclodexrin derivs. is

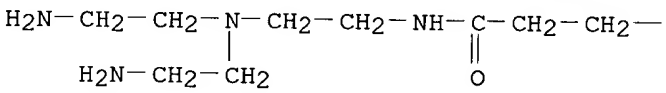
included. The solubility of I in 10.04% 6A-amino-6A-N-(4-aminobutyl)-6A-deoxy-β- **cyclodextrin** (II) (preparation given) was 13.4 mg/mL (the solubility of I in water is 3.6 μg/mL). No precipitation was observed when the solution was stored refrigerated overnight. When the I-II solution was injected i.p. in rats, an anesthetic effect was observed

IT **138141-90-9**
RL: BIOL (Biological study)
(acid dissociation consts. for)

RN 138141-90-9 CAPLUS

CN β-Cyclodextrin, 6A-[[4-[[2-[bis(2-aminoethyl)amino]ethyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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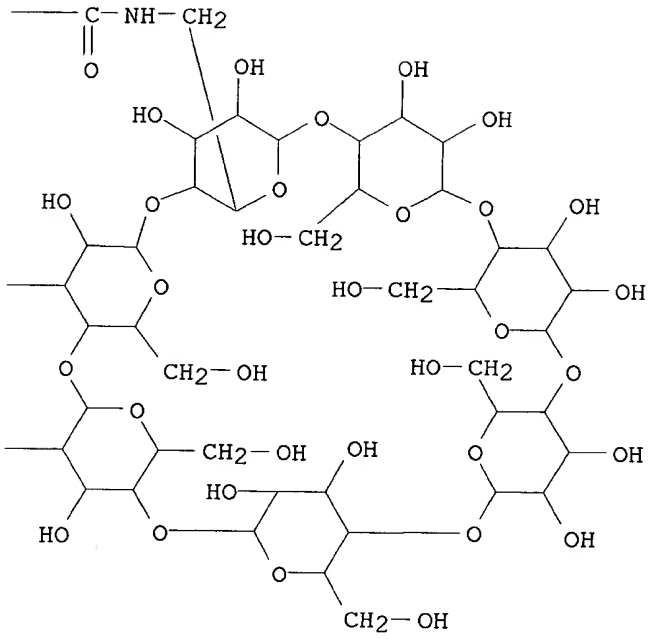
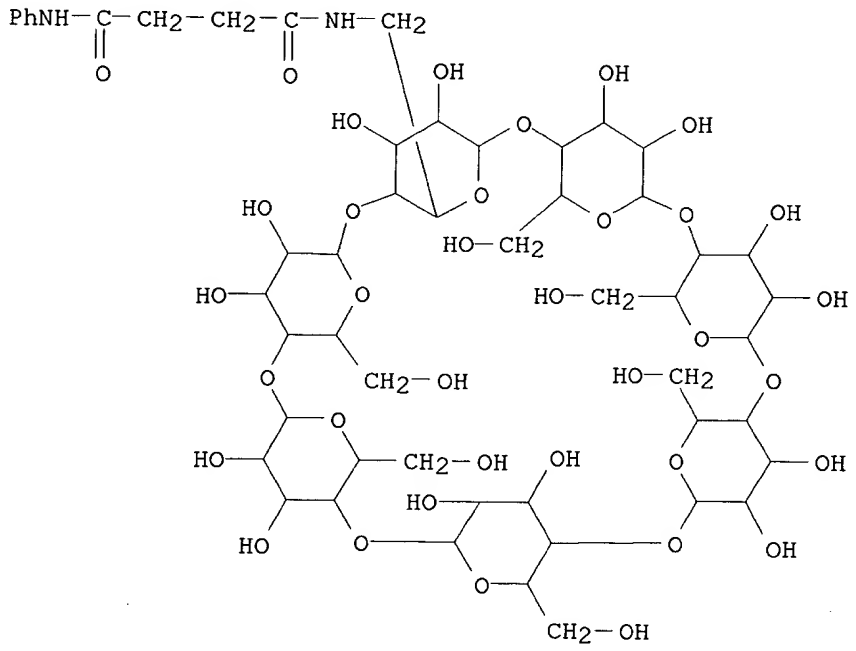


IT **152045-95-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, for **cyclodextrin** derivative preparation for increasing solubility of Alfaxalone or Propofol)
RN 152045-95-9 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[1,4-dioxo-4-(phenylamino)butyl]amino]- (9CI) (CA INDEX NAME)



L14 ANSWER 29 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:574166 CAPLUS
DOCUMENT NUMBER: 119:174166
TITLE: Preparation of anti-retroviral **cyclodextrin** polysulfate esters
INVENTOR(S): Moriya, Tamon; Kurita, Hiroki; Otake, Toru; Mori, Haruyo; Morimoto, Motoko
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04309502	A2	19921102	JP 1991-164079	19910408

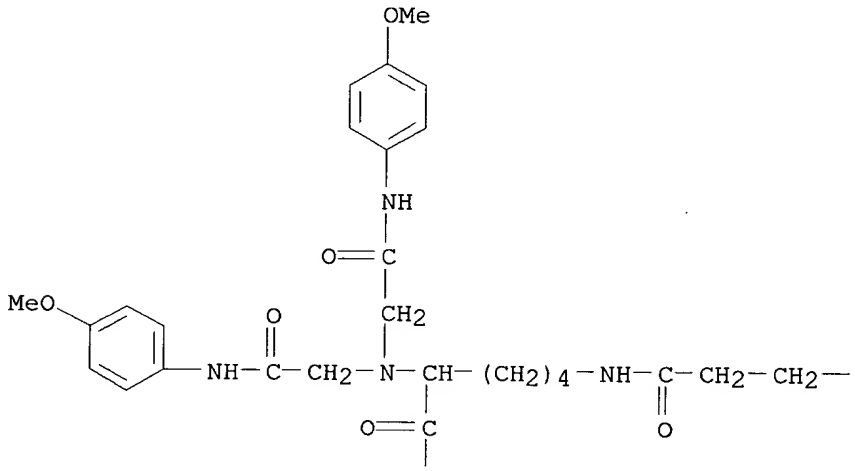
PRIORITY APPLN. INFO.: JP 1991-164079 19910408
OTHER SOURCE(S): MARPAT 119:174166

AB The title esters contain ≥1 glycosyl unit having deoxyamino group on C-6 position which is derived from amino acids, and multiple sulfate ester groups or salts thereof, and are prepared Heating mono[6-(N-α-benzyloxycarbonyltriptophyl)amino-6-deoxy]-β-**cyclodextrin** in pyridine (Py) while stirring with SO3-Py complex at 100° gave the desired polysulfate ester.

IT **150213-93-7P 150213-94-8P 150213-95-9P**
150213-96-0P 150266-07-2P 150319-88-3P
150319-89-4P 150319-90-7P 150319-91-8P
150338-98-0P
RL: PREP (Preparation)
(anti-retroviral, manufacture of)

RN 150213-93-7 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[5-[bis[2-[(4-methoxyphenyl)amino]-2-oxoethyl]amino]-6-[(4-methoxyphenyl)amino]-6-oxohexyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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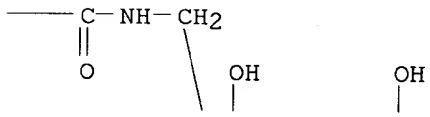

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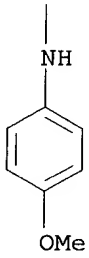

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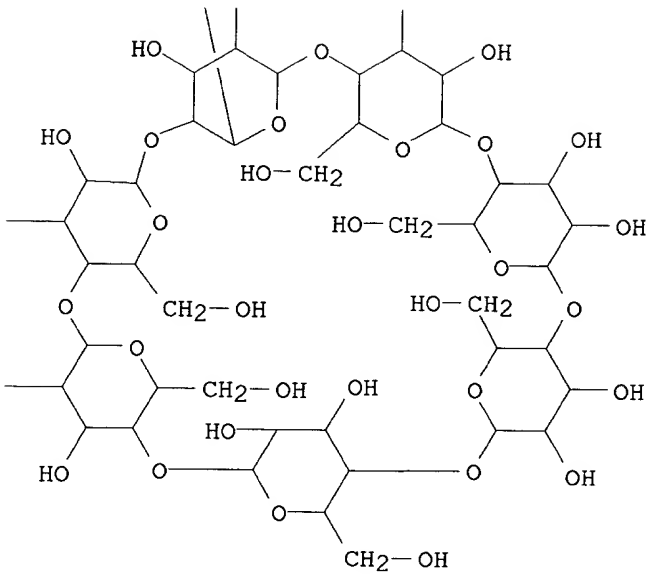
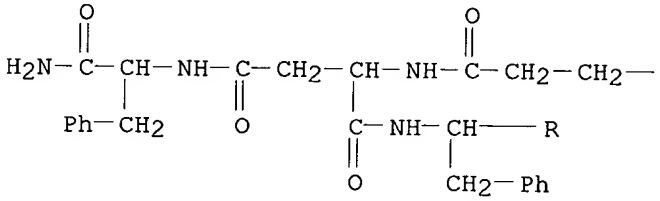


RN 150213-94-8 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[3-[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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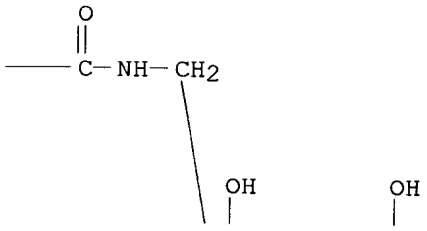

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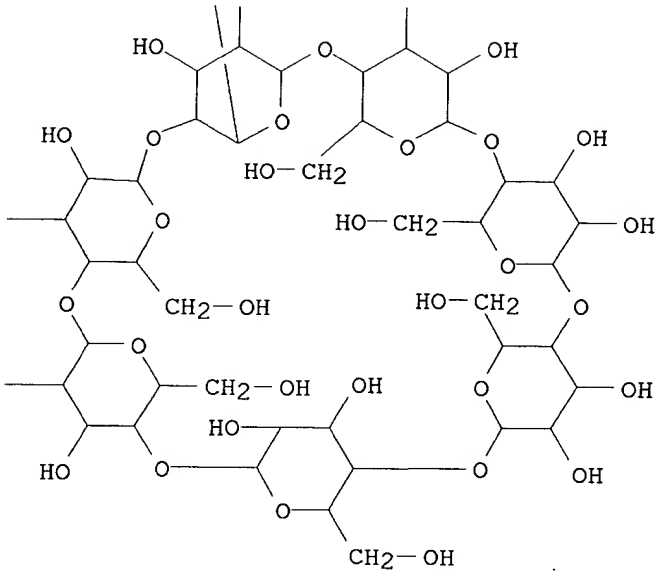
PAGE 2-B



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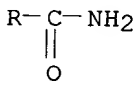
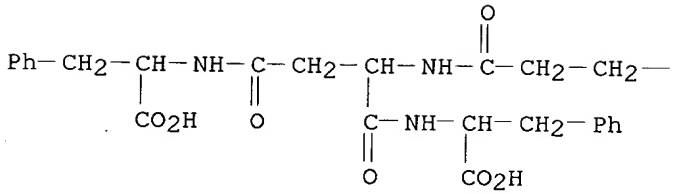


RN 150213-95-9 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[3-[(1-carboxy-2-phenylethyl)amino]-1-[[(1-carboxy-2-phenylethyl)amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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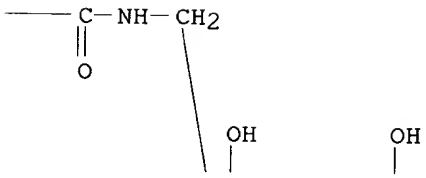

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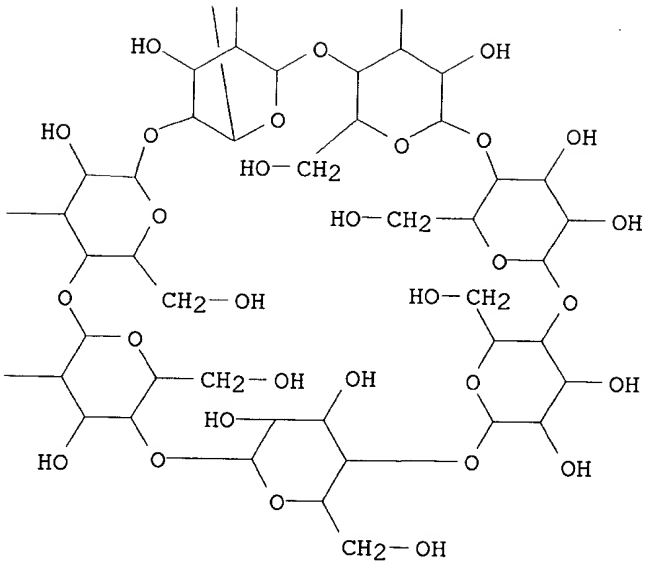
PAGE 2-B



RN 150213-96-0 CAPLUS
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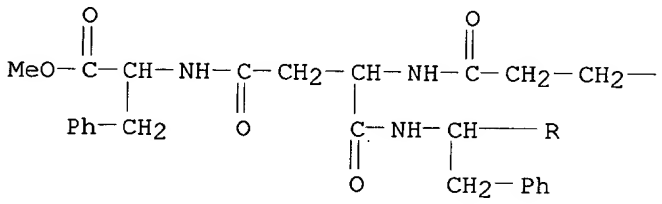
PAGE 1-A



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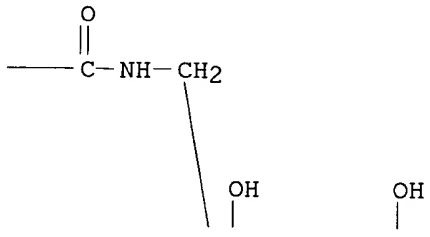

PAGE 2-A

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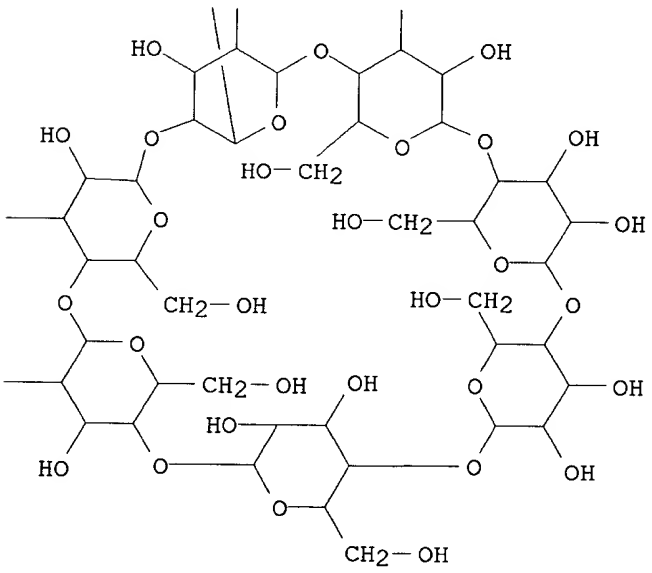
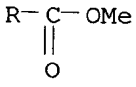
PAGE 2-B

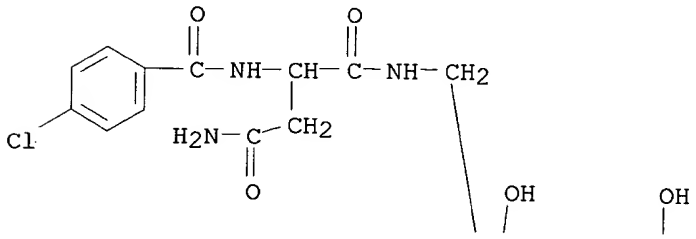


PAGE 3-A

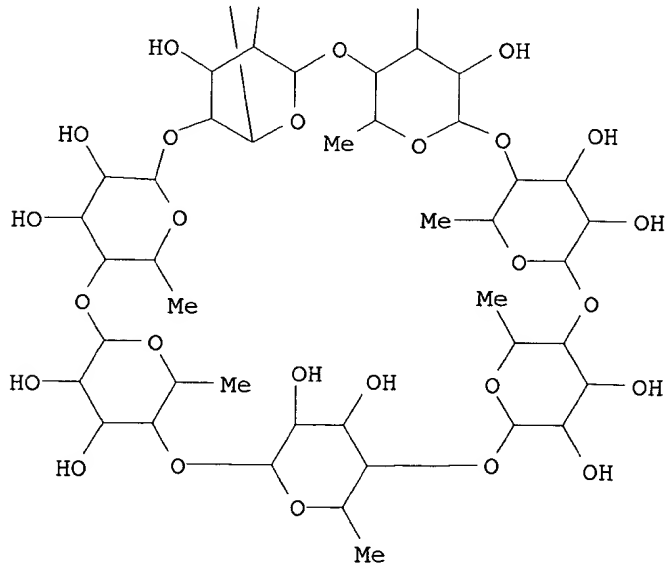


RN 150266-07-2 CAPLUS
CN β-Cyclodextrin, 6A,6?-bis[[4-amino-2-[(4-chlorobenzoyl)amino]-1,4-dioxobutyl]amino]-6A,6?-dideoxy-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

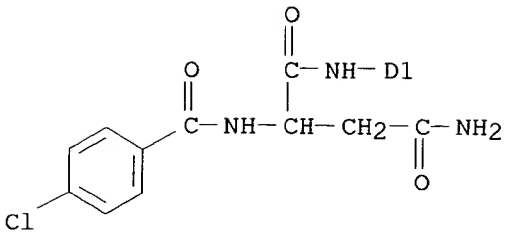
PAGE 1-A



PAGE 2-A



PAGE 3-A



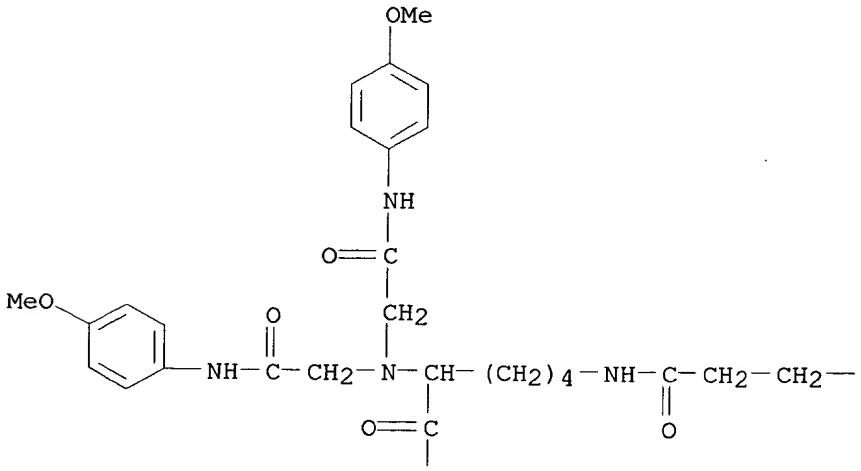
5 (D1—OH)

RN 150319-88-3 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[5-[bis[2-[(4-methoxyphenyl)amino]-2-oxoethyl]amino]-6-[(4-methoxyphenyl)amino]-6-oxohexyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy-, octadecakis(hydrogen sulfate) (ester), octadecapotassium salt (9CI) (CA INDEX NAME)

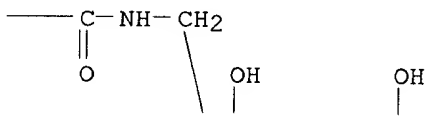
CM 1

CRN 150213-93-7
CMF C77 H112 N6 O42

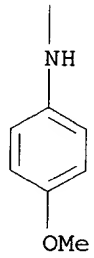
PAGE 1-A



PAGE 1-B



PAGE 2-A



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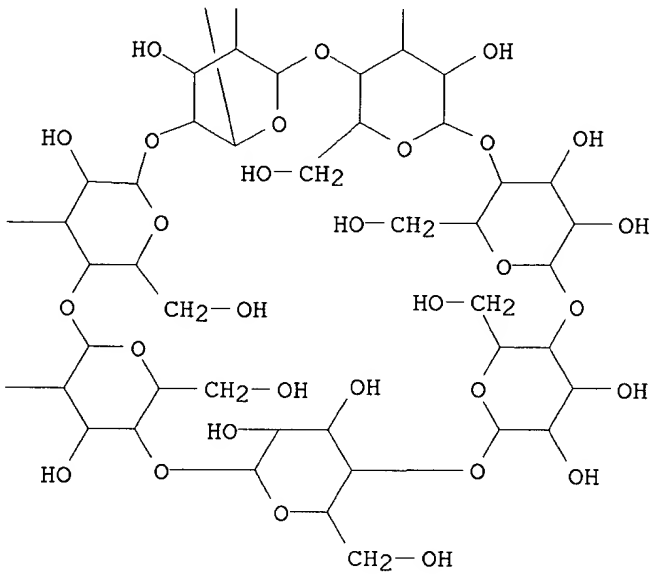
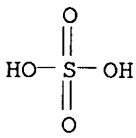
PAGE 2-B



CM 2

CRN 7664-93-9
CMF H2 O4 S

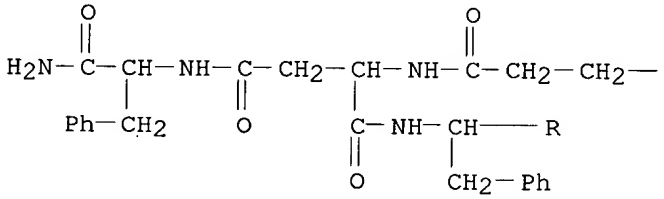


RN 150319-89-4 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[3-[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy-, nonadecakis(hydrogen sulfate) (ester), nonadecapotassium salt (9CI) (CA INDEX NAME)

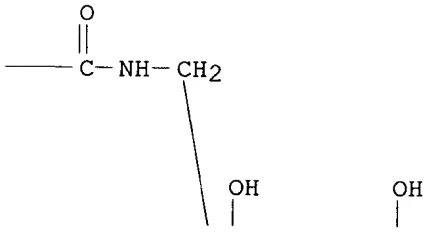
CM 1

CRN 150213-94-8
CMF C68 H100 N6 O40

PAGE 1-A



PAGE 1-B



PAGE 2-A

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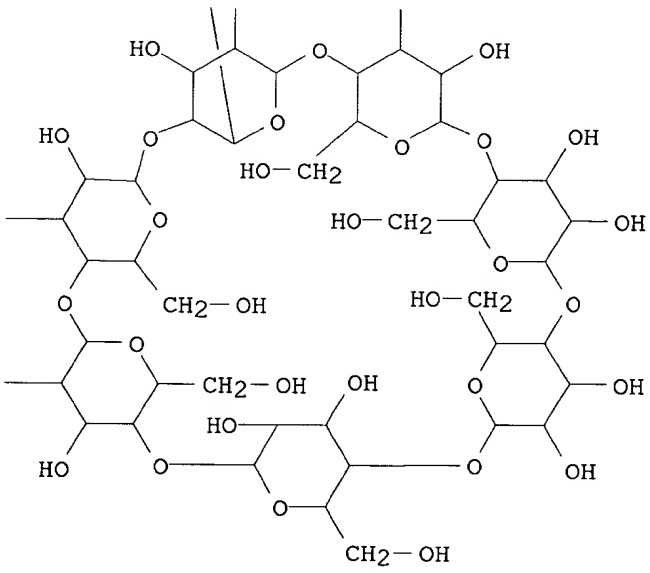
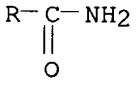
PAGE 2-B

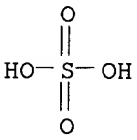


PAGE 3-A



CM 2

CRN 7664-93-9
CMF H2 O4 S

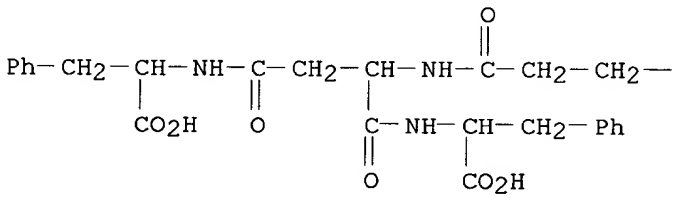


RN 150319-90-7 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[3-[(1-carboxy-2-phenylethyl)amino]-1-[[(1-carboxy-2-phenylethyl)amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy-, octadecakis(hydrogen sulfate) (ester), octadecapotassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 150213-95-9
CMF C68 H98 N4 O42

PAGE 1-A



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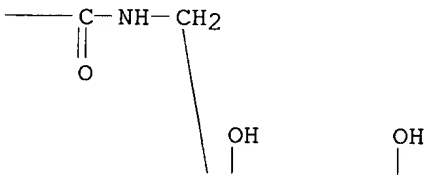

PAGE 2-A

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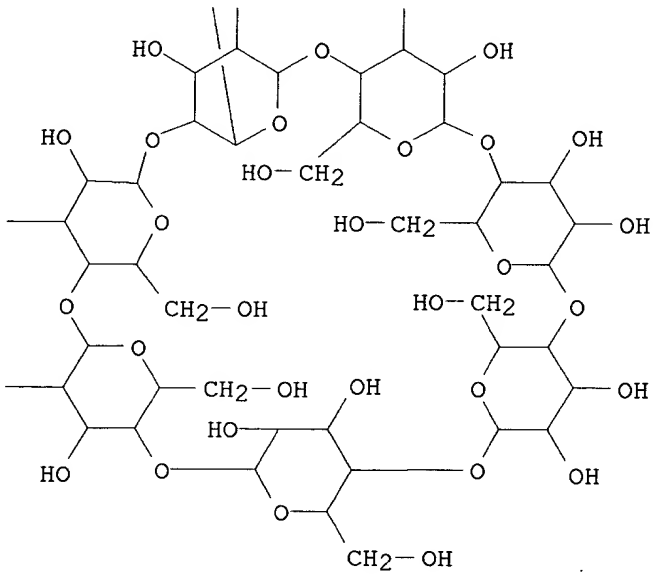
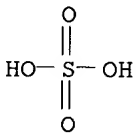
PAGE 2-B



CM 2

CRN 7664-93-9
CMF H2 O4 S

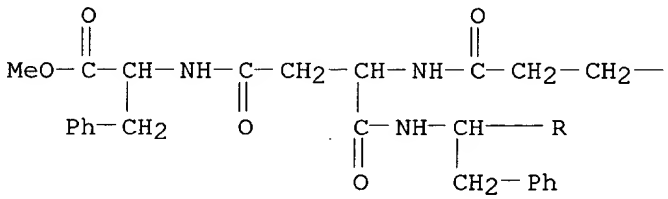


RN 150319-91-8 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[[3-[[2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-, nonadecakis(hydrogen sulfate) (ester), nonadecapotassium salt (9CI) (CA INDEX NAME)

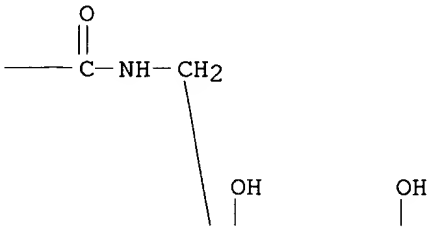
CM 1

CRN 150213-96-0
CMF C70 H102 N4 O42

PAGE 1-A



PAGE 1-B



PAGE 2-A

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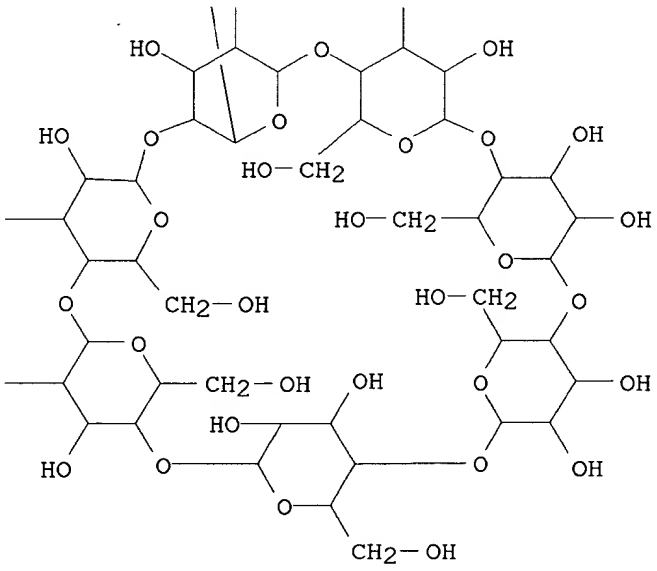
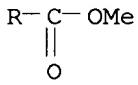
PAGE 2-B

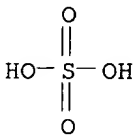


PAGE 3-A



CM 2

CRN 7664-93-9
CMF H2 O4 S

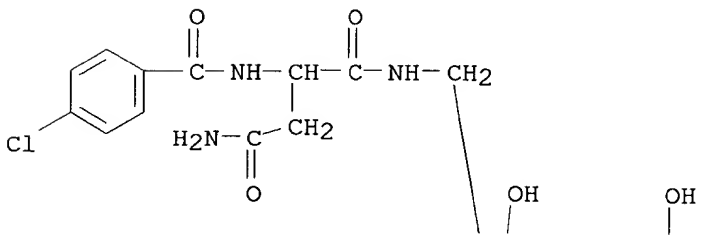


RN 150338-98-0 CAPLUS
CN β-Cyclodextrin, 6A,6?-bis[[4-amino-2-[(4-chlorobenzoyl)amino]-1,4-dioxobutyl]amino]-6A,6?-dideoxy-, heptadecakis(hydrogen sulfate) (ester), heptadecapotassium salt, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

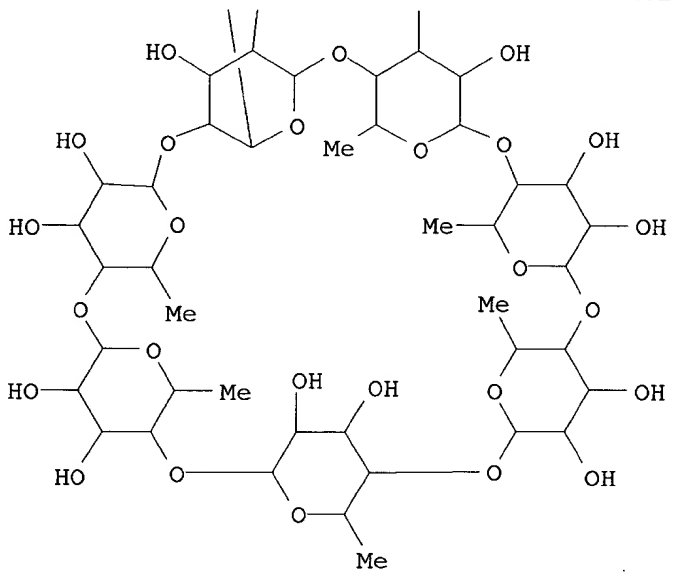
CM 1

CRN 150266-07-2
CMF C64 H90 Cl2 N6 O39
CCI IDS

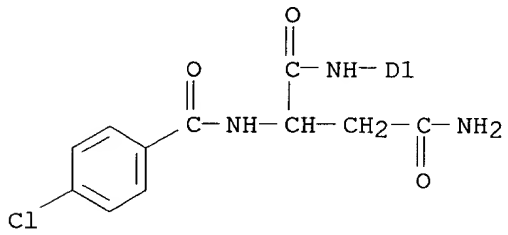
PAGE 1-A



PAGE 2-A



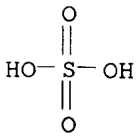
PAGE 3-A



5 (D1—OH)

CM 2

CRN 7664-93-9
CMF H2 O4 S



L14 ANSWER 30 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:429142 CAPLUS
DOCUMENT NUMBER: 117:29142
TITLE: **Cyclodextrin** compositions for pharmaceutical and industrial applications
INVENTOR(S): Coates, John Hewlett; Easton, Christopher John; Lincoln, Stephen Frederick; Van Eyk, Stephen John; May, Bruce Lindley; Williams, Michael Lloyd; Brown, Susan Elizabeth; Lepore, Angelo; Liao, Ming Long; et al.
PATENT ASSIGNEE(S): Australian Commercial Research and Development Ltd., Australia
SOURCE: PCT Int. Appl., 179 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9113100	A1	19910905	WO 1991-AU71	19910301
W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, PL, RO, SD, SE, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9174531	A1	19910918	AU 1991-74531	19910301
EP 518930	A1	19921223	EP 1991-905452	19910301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ES 2036504	A6	19930516	ES 1991-50026	19911031

PRIORITY APPLN. INFO.:

AU 1990-8899	19900302
AU 1990-8993	19900308
AU 1990-9344	19900328
AU 1990-9373	19900329
AU 1990-9756	19900423
AU 1990-1538	19900803
AU 1990-1755	19900816
AU 1990-2269	19900912
AU 1990-3596	19901129
AU 1990-3624	19901130
AU 1991-4284	19910121
AU 1991-4603	19910214
AU 1991-4856	19910227
WO 1991-AU71	19910301

AB **Cyclodextrin** derivs. forming soluble, stable inclusion complexes and covalent compds. with drugs, agrochems., etc. are prepared An α-**cyclodextrin** 6-tosylate was treated with NaN3, hydrogenated to the 6-amino-6-deoxy derivative, and condensed with ibuprofen to give a drug for ibuprofen delivery. The **cyclodextrin** derivs. and their inclusion complexes can also be used for the chromatog. separation of enantiomers from racemic mixts.

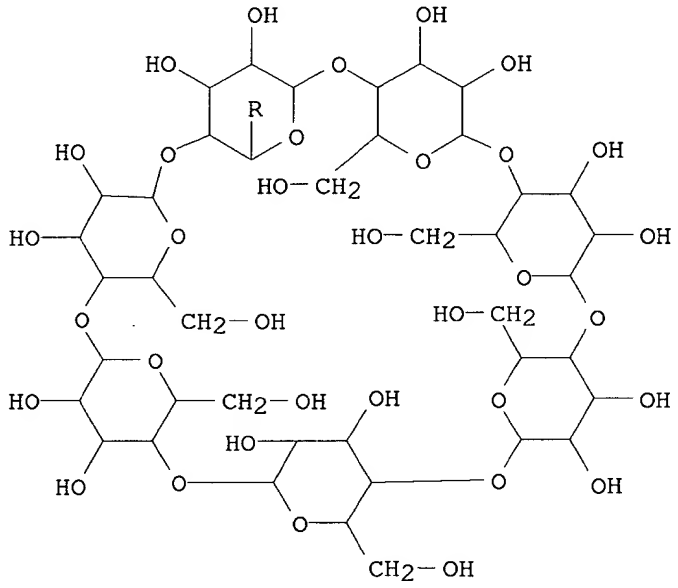
IT **130912-22-0P 130912-24-2P 138141-88-5P**
138166-05-9P
RL: PREP (Preparation)
(preparation of, in manufacture of drug delivery system)

RN 130912-22-0 CAPLUS
CN α-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-

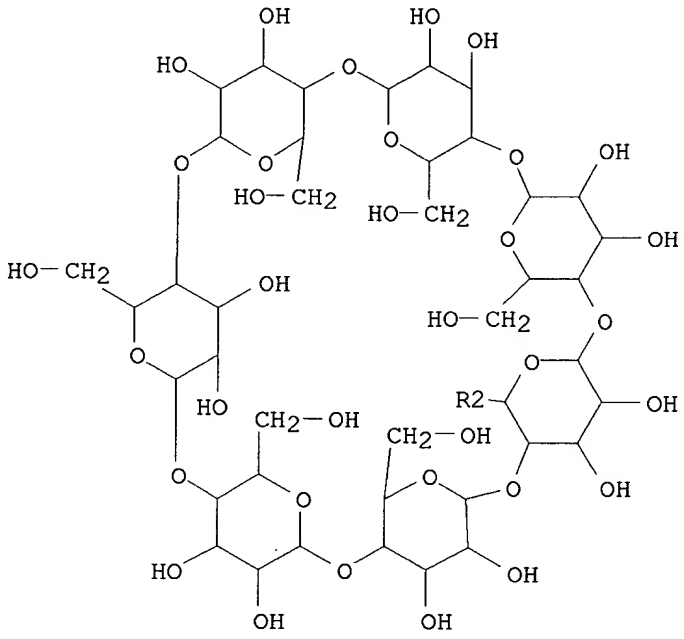
deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 130912-24-2 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

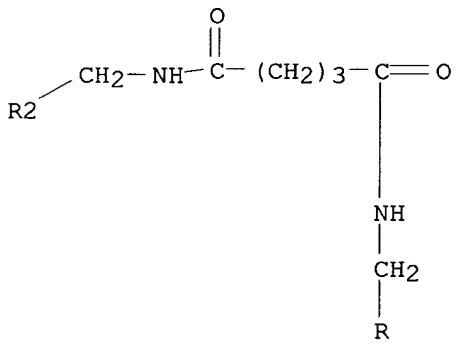
PAGE 1-A



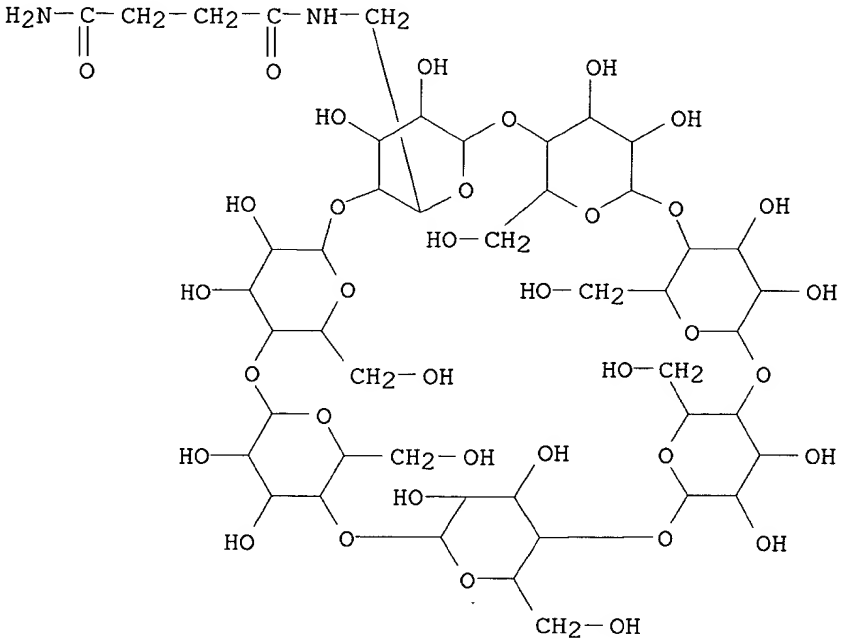
PAGE 2-A



PAGE 3-A



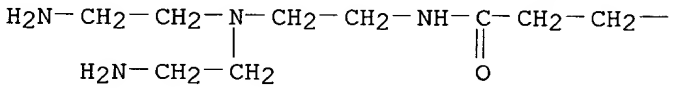
RN 138141-88-5 CAPLUS
CN β-Cyclodextrin, 6A-[(4-amino-1,4-dioxobutyl)amino]-6A-deoxy- (9CI) (CA INDEX NAME)



RN 138166-05-9 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[(6A-deoxy-α-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **138141-90-9P 138166-06-0P**
RL: PREP (Preparation)
(preparation of, in manufacture of drug delivery systems)
RN 138141-90-9 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[2-[bis(2-aminoethyl)amino]ethyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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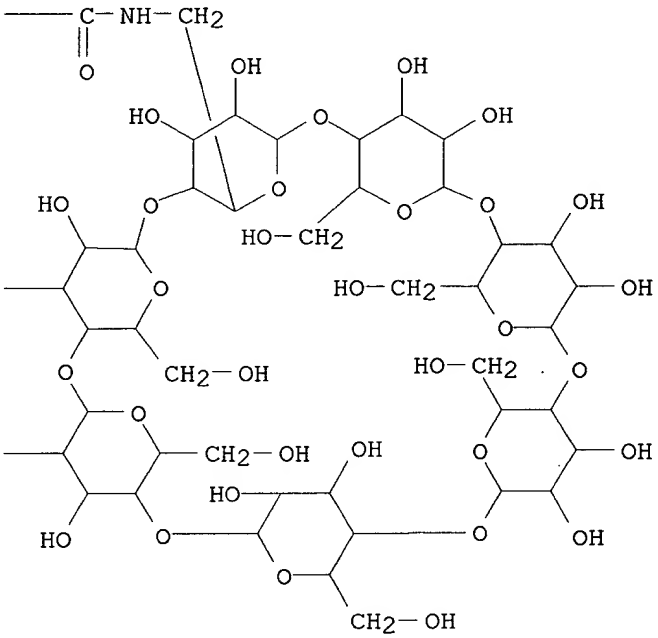
PAGE 1-B



RN 138166-06-0 CAPLUS
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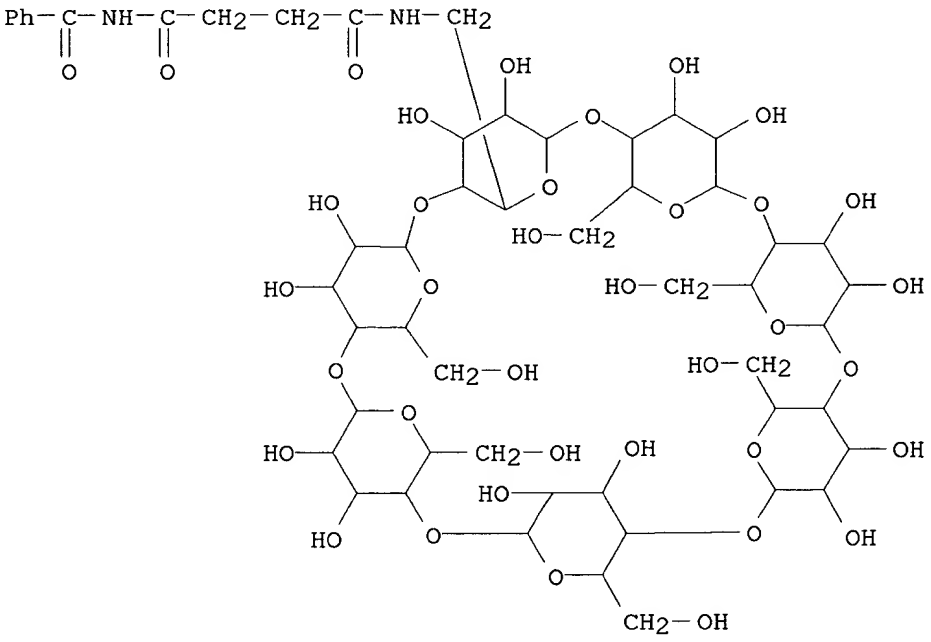
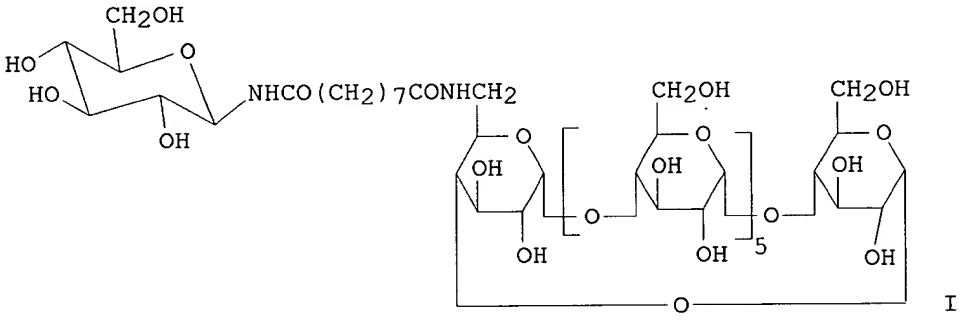


L14 ANSWER 31 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:152238 CAPLUS
DOCUMENT NUMBER: 116:152238
TITLE: Vectorized transport of drugs: synthesis of a new glycosyl derivative of β- **cyclodextrin**
AUTHOR(S): Parrot-Lopez, Helene; Galons, Herve; Coleman, Anthony W.; Mahuteau, Jacqueline; Miocque, Marcel
CORPORATE SOURCE: Fac. Pharm., Univ. Rene Descartes, Paris, 75270, Fr.
SOURCE: Tetrahedron Letters (1992), 33(2), 209-12
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 116:152238
GI



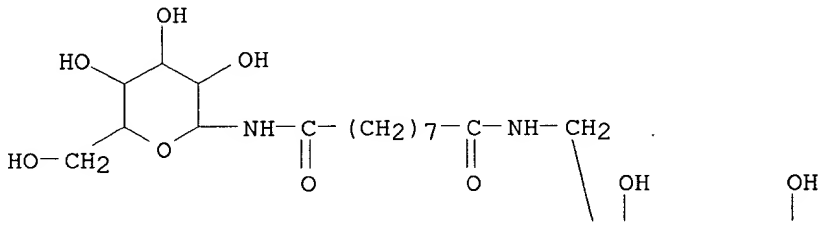
I

AB Monosubstitution at the O-6 position of β- **cyclodextrin** by a β-N-glucosyl residue was achieved with a C9 diamide spacer as the interglycosidic linkage. The new glycosyl derivative I is much more soluble (200 g/L) in water but retains the capacity to include and to enhance the solubility of pharmacol. active mols.

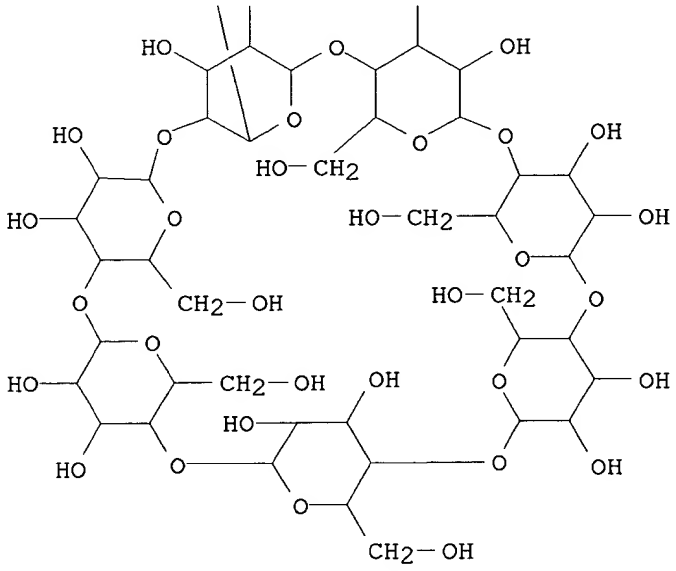
IT **139921-46-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, solubility, and inclusion reaction of, with nicardipine)

RN 139921-46-3 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[9-(β-D-glucopyranosylamino)-1,9-dioxononyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L14 ANSWER 32 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:113525 CAPLUS
DOCUMENT NUMBER: 116:113525
TITLE: **Cyclodextrin** inclusion complexes as

pharmaceutical carriers
INVENTOR(S): Weinshenker, Ned M.
PATENT ASSIGNEE(S): Cyclex, Inc., USA
SOURCE: U.S., 23 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5068227	A	19911126	US 1989-298634	19890118

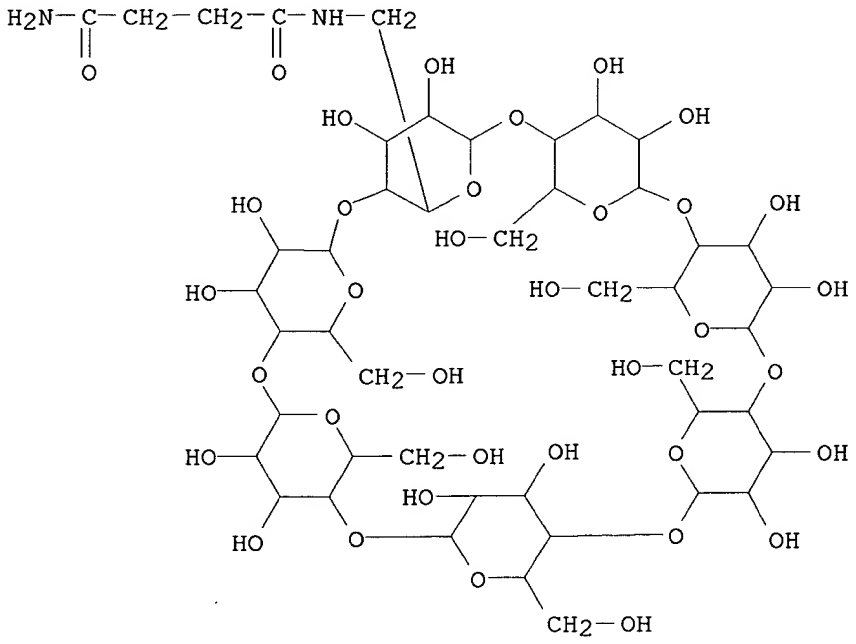
PRIORITY APPLN. INFO.: US 1989-298634 19890118

AB **Cyclodextrins** (I) are coupled to biorecognition mols. such as antibodies. The **cyclodextrins** so coupled provide a cavity or complexation zone into which active agents such as labels or drugs may be incorporated. The active agent forms a noncovalently bonded inclusion complex within the cavity of I and thus remains associated with I and the coupled biorecognition mol. and thus can be delivered to the other half of the biospecific recognition. IgG-polyglycine-6-(3-carboxypropanamido)-6-deoxy-β- **cyclodextrin** (II) (preparation is given) was added to methotrexate to obtain an I-II inclusion complex.

IT **138141-88-5DP**, conjugates with IgG **139143-66-1P** **139143-67-2P 139143-68-3P 139143-69-4DP**, conjugates with antibodies, complexes with chlorambucil **139143-70-7DP**, conjugates with monoclonal antibody **139143-74-1DP**, conjugates with IgG **139143-75-2DP**, conjugates with IgG **139175-89-6P 139175-90-9DP**, conjugates with monoclonal antibody **139175-91-0DP**, reaction products with cyclodexrin derivs., conjugates with IgG
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

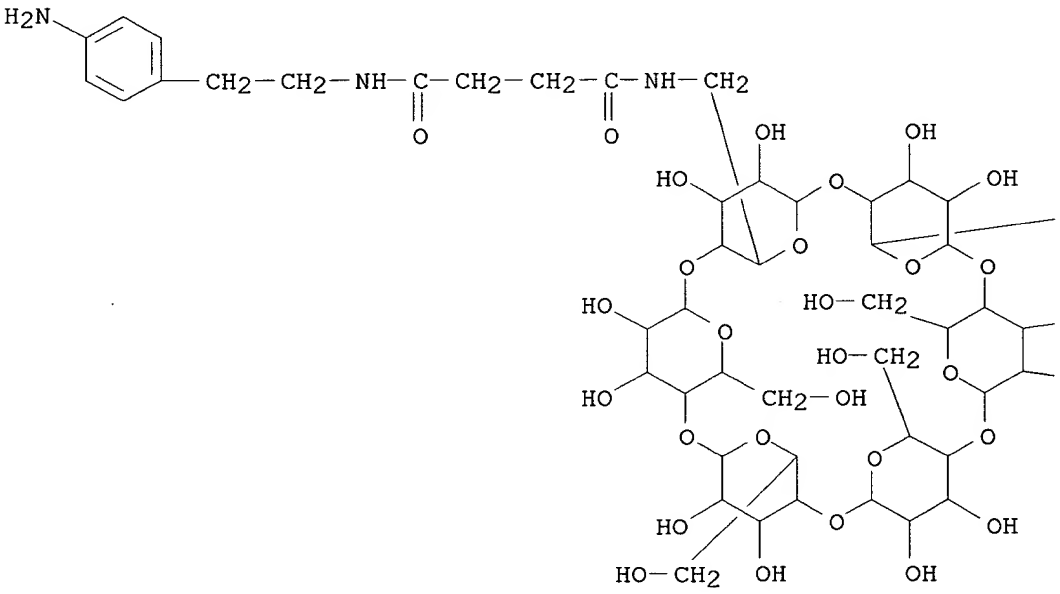
RN 138141-88-5 CAPLUS

CN β-Cyclodextrin, 6A-[(4-amino-1,4-dioxobutyl)amino]-6A-deoxy- (9CI) (CA INDEX NAME)



RN 139143-66-1 CAPLUS
CN α-Cyclodextrin, 6A-[[4-[[2-(4-aminophenyl)ethyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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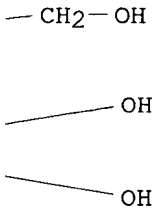
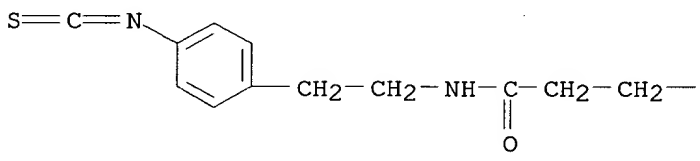


RN 139143-67-2 CAPLUS
CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[[2-(4-isothiocyanatophenyl)ethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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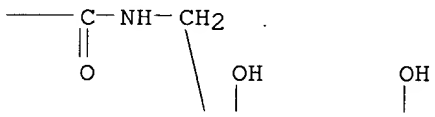

PAGE 2-A

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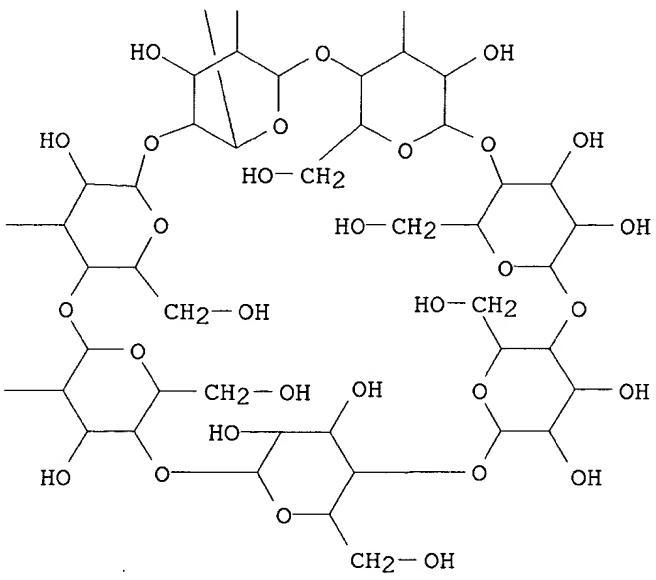

RN 139143-68-3 CAPLUS
CN γ-Cyclodextrin, 6A-deoxy-6A-[[4-[[2-(4-isothiocyanatophenyl)ethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

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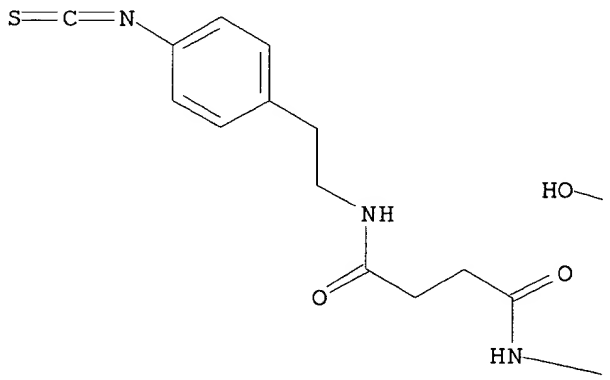

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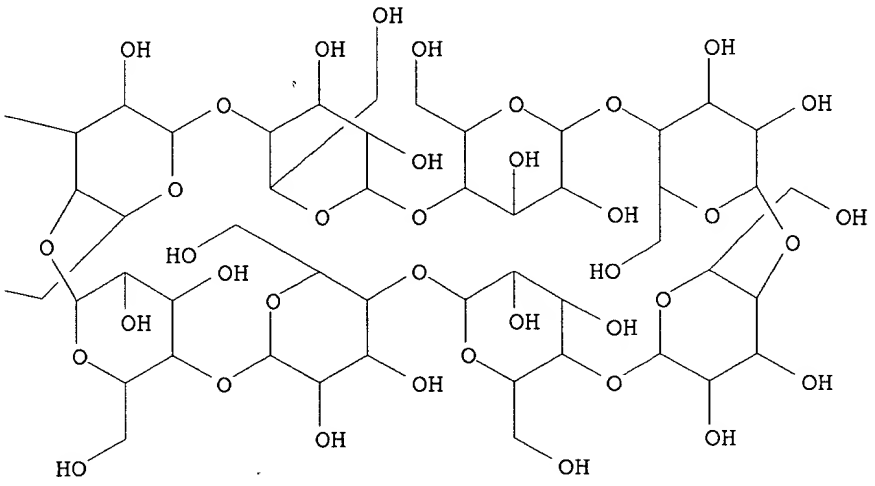
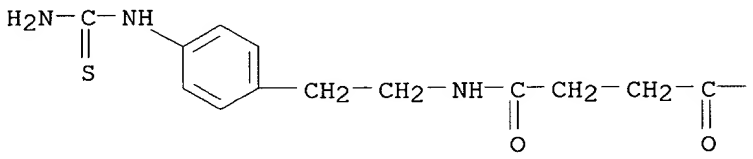


RN 139143-69-4 CAPLUS
CN α-Cyclodextrin, 6A-[[4-[[2-[4-[(aminothioxomethyl)amino]phenyl]ethyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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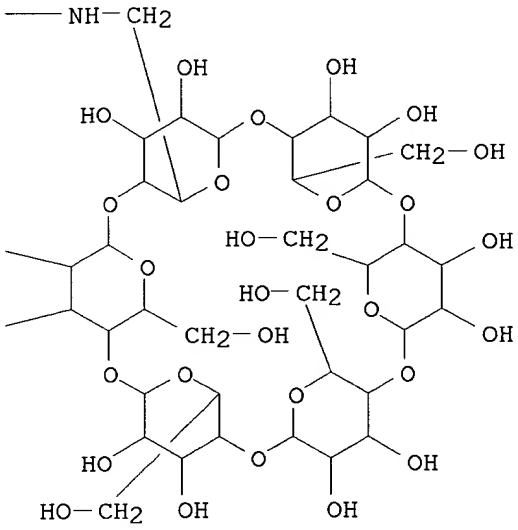
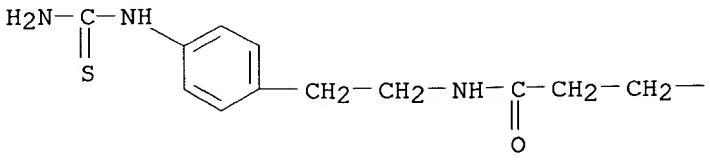
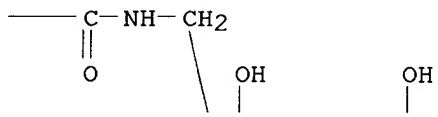


RN 139143-70-7 CAPLUS
CN β-Cyclodextrin, 6A-[[4-[[2-[4-[(aminothioxomethyl)amino]phenyl]ethyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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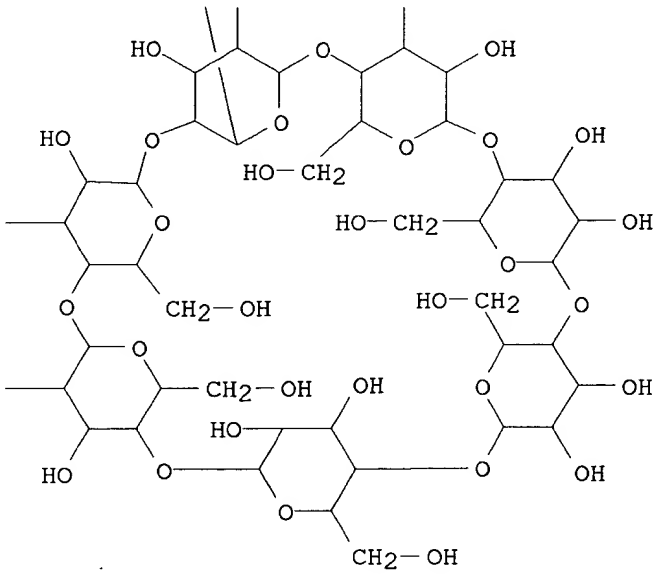
PAGE 2-B



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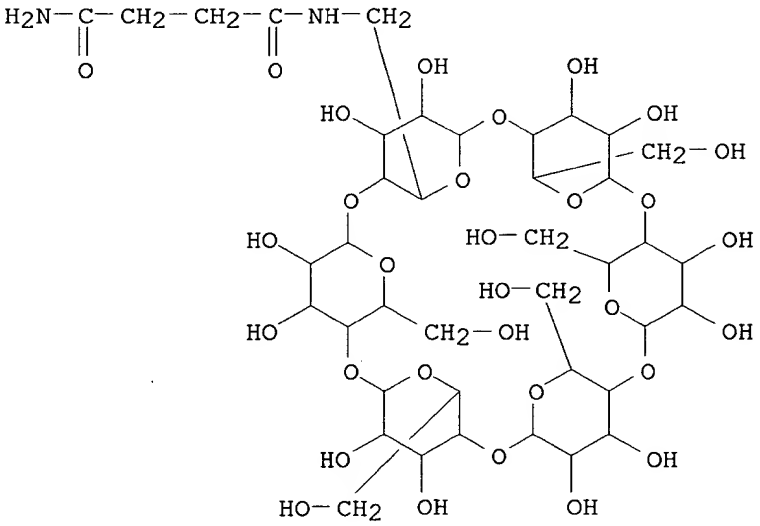
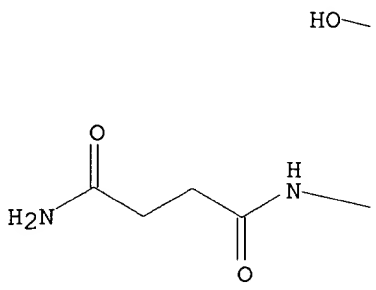
CN α-Cyclodextrin, 6A-[(4-amino-1,4-dioxobutyl)amino]-6A-deoxy- (9CI) (CA INDEX NAME)

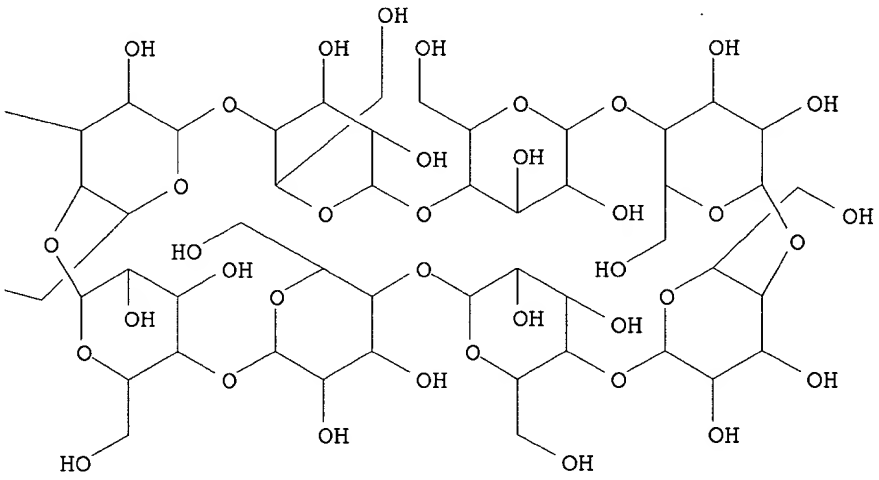


RN 139143-75-2 CAPLUS
CN γ-Cyclodextrin, 6A-[(4-amino-1,4-dioxobutyl)amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

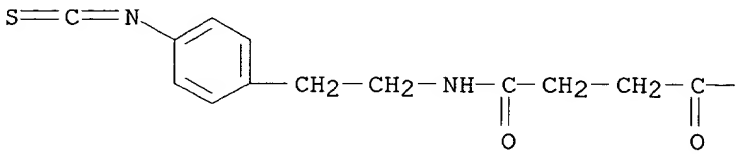


PAGE 1-B



RN 139175-89-6 CAPLUS
CN α-Cyclodextrin, 6A-deoxy-6A-[[4-[[2-(4-isothiocyanatophenyl)ethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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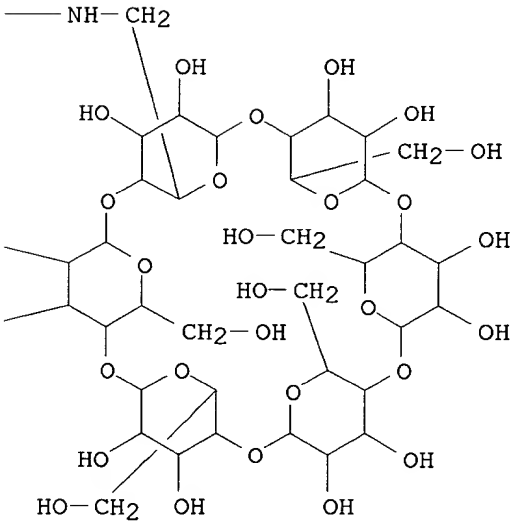
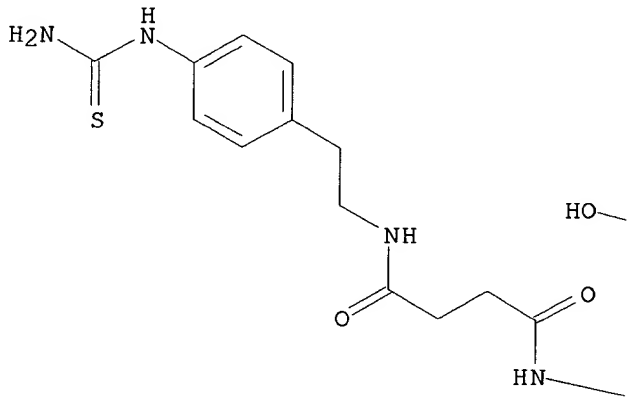
PAGE 1-B

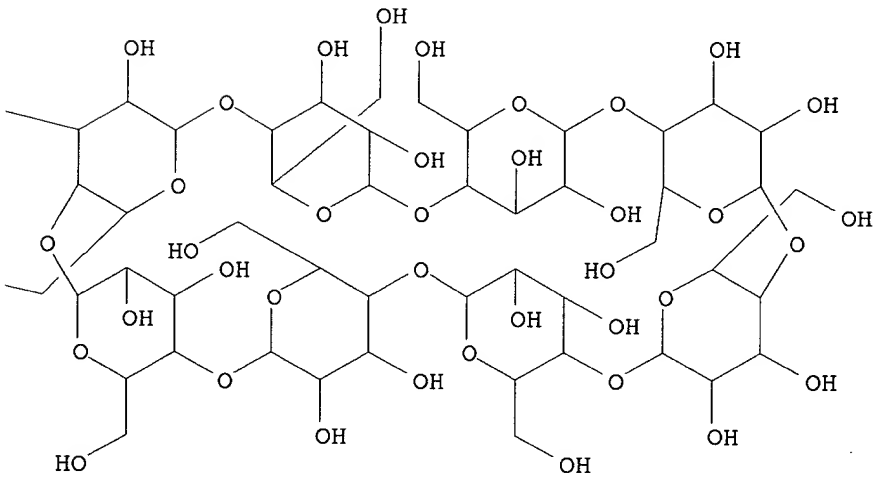


RN 139175-90-9 CAPLUS
CN γ-Cyclodextrin, 6A-deoxy-6A-[[4-[[2-[4-[(aminothioxomethyl)amino]phenyl]ethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

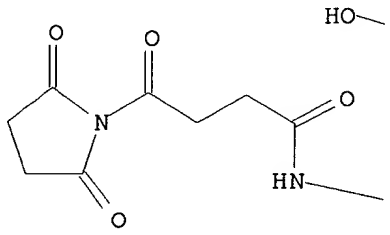


PAGE 1-B

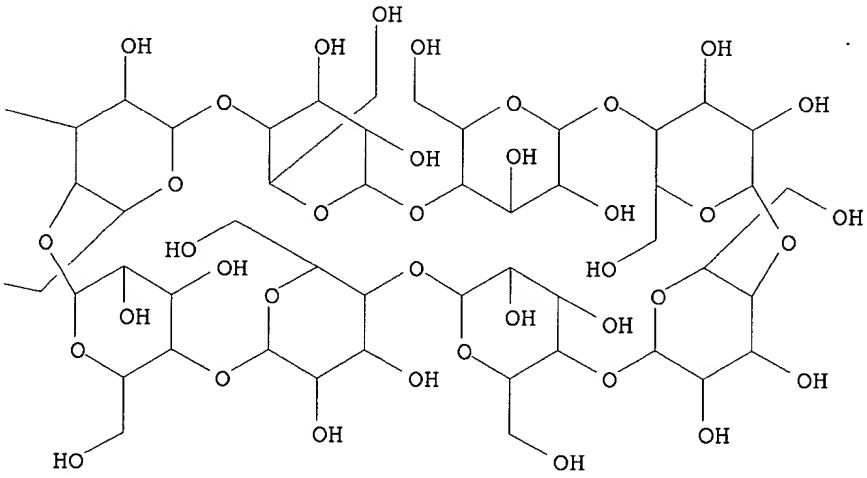


RN 139175-91-0 CAPLUS
CN γ-Cyclodextrin, 6A-deoxy-6A-[[4-(2,5-dioxo-1-pyrrolidinyl)-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L14 ANSWER 33 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:88647 CAPLUS
DOCUMENT NUMBER: 114:88647
TITLE: Preparation of **cyclodextrin** derivatives for active agent delivery as inclusion complexes and for separating racemic mixtures
INVENTOR(S): Lincoln, Stephen Frederick; Coates, John Hewlett; Easton, Christopher John; Van Eyk, Stephen John; May, Bruce Lindly; Singh, Paramjit; Williams, Michael Lloyd; Stile, Martyn Allen
PATENT ASSIGNEE(S): Australian Commercial Research and Development Ltd., Australia
SOURCE: PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9002141	A1	19900308	WO 1989-AU359	19890823
W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 8944290	A1	19900323	AU 1989-44290	19890823
AU 693072	B2	19980625		
EP 431080	A1	19910612	EP 1989-911240	19890823
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
BR 8907625	A	19910820	BR 1989-7625	19890823
JP 04500229	T2	19920116	JP 1989-510576	19890823
CN 1040987	A	19900404	CN 1989-106650	19890830
DD 297833	A5	19920123	DD 1989-332260	19890831
ZA 8906624	A	19920129	ZA 1989-6624	19900830
US 5324750	A	19940628	US 1992-979451	19921120

PRIORITY APPLN. INFO.:		
	AU 1988-165	19880831
	AU 1988-189	19880901
	AU 1988-618	19880927
	AU 1988-1053	19881019
	AU 1988-1198	19881027
	AU 1988-1417	19881111
	AU 1989-4894	19890626
	AU 1989-4909	19890626
	AU 1989-5034	19890703
	AU 1989-5278	19890717
	AU 1989-5354	19890719
	AU 1989-5576	19890803
	AU 1989-5641	19890807
	AU 1989-5682	19890809
	WO 1989-AU359	19890823
	US 1991-684888	19910412

AB **Cyclodextrin** derivs. are prepared, which form soluble and stable inclusion complexes and covalently-bonded compds. with drugs, pesticides and cosmetics. The **cyclodextrin** derivs. have ≥1 NH2 group substituted with OH at C-2, C-3, or C-6. 6A-O-p-Toluenesulfonyl-β- **cyclodextrin** prepared as usual, was treated with Na azide and 1,1,2,2-tetrachloroethane, to give 6A-azido-6A-deoxy-β- **cyclodextrin**, which was hydrogenated over Pd black, in water, to yield 6A-amino-6A-deoxy-β- **cyclodextrin**. This was treated with ibuprofen anhydride to give 6A-deoxy-6A-(α-methyl-4-isobutylphenylacetamido)-β- **cyclodextrin**, a prodrug for ibuprofen delivery. The **cyclodextrin** derivs. and their inclusion complexes may also be used for the chromatog. separation of enantiomers from racemic mixts.

IT **130912-22-0P 130912-23-1P**
RL: THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, for drug delivery systems)

RN 130912-22-0 CAPLUS
CN α-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 130912-23-1 CAPLUS

CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

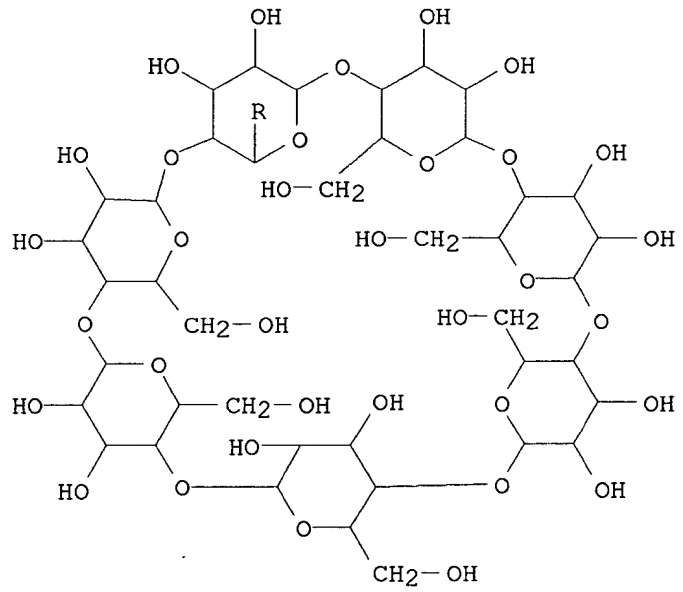
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L14 ANSWER 34 OF 34 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:6998 CAPLUS
DOCUMENT NUMBER: 114:6998
TITLE: A new synthesis of **cyclodextrin** dimers
AUTHOR(S): Coates, John H.; Easton, Christopher J.; Van Eyk, Stephen J.; Lincoln, Stephen F.; May, Bruce L.; Whalland, Craig B.; Williams, Michael L.
CORPORATE SOURCE: Dep. Chem., Univ. Adelaide, Adelaide, 5001, Australia
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1990), (9), 2619-20
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 114:6998
AB The synthesis and characterization of NHCO(CH2)nCONH (n = 2, 3 for β, n = 2 for α) linked **cyclodextrins** is reported.
IT **130912-22-0P 130912-23-1P 130912-24-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as potential inclusion complex)
RN 130912-22-0 CAPLUS
CN α-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 130912-23-1 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,4-dioxo-1,4-butanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 130912-24-2 CAPLUS
CN β-Cyclodextrin, 6A,6'A-[(1,5-dioxo-1,5-pentanediyl)diimino]bis[6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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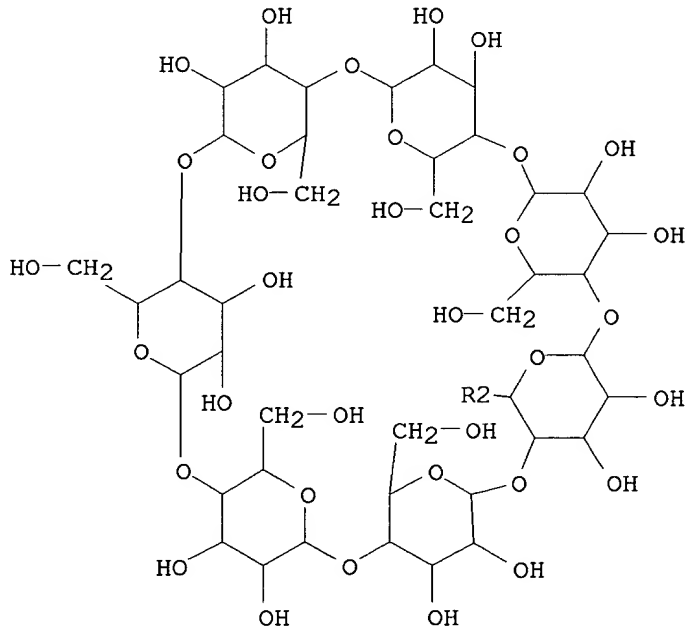

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